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ANDOVER
1974–75 Catalog



1974-75 Catalog

Published by Phillips Academy
Andover, Massachusetts

ANDOVER

CALENDAR

Fall Term

September 4, Wednesday	New Juniors and Lowers register, 12:00 noon-3:00 p.m.
September 6, Friday	New Uppers and Seniors register by 12:00 noon
September 7, Saturday	Old students with make-ups register by 12:00 noon
September 7, Saturday	All other old students register by 8:00 p.m.
September 9, Monday	Arena day registration and assignment to classes
September 11, Wednesday	Classes start
September 14, Saturday	No classes. Testing program for all students.
September 28, Saturday	No classes
October 12, Saturday	No classes
November 9, Saturday	No classes. Andover-Exeter Football
November 13, Wednesday	Arena day. Registration for Winter trimester.
November 20, Wednesday	Classes end for Fall trimester.
November 22, Friday	Examinations begin
November 26, Tuesday	Examinations end at 12:00 noon; Thanksgiving Recess begins.
December 3, Tuesday,	Thanksgiving Recess ends; return by 8:00 p.m.

Winter Term

December 4, Wednesday	Winter trimester classes begin
December 7, Saturday	No classes
December 19, Thursday	Christmas Recess begins after classes
January 6, Monday	Christmas Recess ends; return by 8:00 p.m.
January 7, Tuesday	Classes resume
January 11, Saturday	No classes (CEEB Exams)
January 25, Saturday	No classes
February 8, Saturday	No classes
February 19, Wednesday	Arena day. Registration for Spring trimester
February 22, Saturday	No classes
March 1, Saturday	Classes end
March 3, Monday	Winter Term Examinations begin
March 6, Thursday	Examinations end at 12:00 noon, end of Winter Term
March 6, Thursday	Spring Vacation begins at 12:00 noon
March 24, Monday	Spring Vacation ends; return by 8:00 p.m.

Spring Term

March 24, Tuesday	Spring trimester classes begin
April 12, Saturday	No classes
April 26, Saturday	No classes
May 10, Saturday	No classes
May 24, Saturday	No classes
May 31, Saturday	Classes end for Spring trimester
June 2, Monday	Spring Term Examinations begin
June 5, Thursday	Examinations end at 12:00 noon; end of Spring Term
June 6, Friday	Commencement

1974-1978

contents

5 INTRODUCTION TO ANDOVER
6 History
7 Faculty and Students
8 Curriculum and Activities
9 The Library
10 Complementary Programs
10 The Andover Summer Session
11 Activities
12 Andover Life
12 The School Day
14 The Clusters
15 Counseling and Discipline
15 The Work Program

17 COURSES
17 The Arts
17 The Addison Gallery
18 Filmmaking
18 Theatre
19 Music
20 The Classics
21 English
23 History and Social Science
24 Mathematics
25 Modern Foreign Languages
26 French
27 German
27 Russian
28 Spanish
28 Religion
29 Science
29 Archaeology
30 Biology
32 Chemistry
33 Physics

35 ATHLETICS

39 HEALTH CARE

39 TUITION
40 Other Expenses

43 ADMISSIONS
43 Application Procedure
43 The four steps for Application
43 Secondary School Admissions Test
44 Senior Class Candidates
44 Acceptance Dates
44 Early Decision
44 Whom to Contact at Andover
45 Financial Aid
46 Alumni Representatives
46 Admissions Interview Schedule

57 TRUSTEES

59 ADMINISTRATION AND FACULTY

71 ANDOVER STUDENTS, 1973-74

89 STATISTICAL INFORMATION
89 Enrollment Statistics
90 College Counseling at Andover
91 College Admissions for the Class of 1974

93 MAPS
93 Campus Map
94 Regional Map

97 PRELIMINARY APPLICATION FORM

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By American standards Phillips Academy – colloquially referred to as "Andover" in our day – is an ancient school, but the purposes for which it was founded during the American Revolution make as much sense now as they did almost two hundred years ago. We believe in rationality with no less confidence than did our eighteenth century forebears, and we feel that any school which helps students joyfully to use their minds has an important place in American education. "Using one's mind" need not be a dry-as-dust thing: clear thinking opens one's eyes to all manners and kinds of living.

Many label schools such as Andover "preparatory" schools. This is only partly true. While we do "prepare" individuals to enter college, and life beyond, we are also concerned with an individual's life here and now, in the kind of person that individual is, in her or his decency, happiness and character.

No educational institution ever stands still. Andover, like all schools, is in constant movement and change, endeavoring to accommodate rationally to a culture which itself is perpetually in movement. The lively and demanding task for this community, students and faculty, is to make these accomodations wise, and constructive.

Theodore R. Sizer

introduction to Andover

Phillips Academy is situated at Andover, in the County of Essex, Massachusetts. The Constitution and original deed of gift of the Academy were signed April 21, 1778, by Esquire Samuel Phillips of the north parish of Andover and his brother, John Phillips, LL.D., of Exeter, New Hampshire, in the presence of Samuel Phillips, Jr. (then but twenty-six years old), afterward judge of the Court of Common Pleas for Essex County, president of the Massachusetts Senate and lieutenant governor of the Commonwealth.

Our constitution, written by Samuel Phillips, Jr., with the advice and aid of his friend Eliphalet Pearson, who became first Master, shaped the ideals of the school then as now:

> A serious consideration of the premises, and an observation of the growing neglect of youth, have excited in us a painful anxiety for the event, and determined us to make, in the following Conveyance, a humble dedication to our Heavenly Benefactor of the ability, wherewith he hath blessed us, to lay the foundation of a public free School or Academy for the purpose of instructing Youth, not only in English and Latin Grammar, Writing, Arithmetic, and those Sciences, wherein they are commonly taught, but more especially to learn them the great end and real business of living...

The founders appealed to the faculty:

> But above all, it is expected that the Master's attention to the disposition of the minds and morals of the youth under his charge will exceed every other care; well considering that, though goodness without knowledge (as it respects others) is weak and feeble, yet knowledge without goodness is dangerous, and that both united form the noblest character, and lay the surest foundation of usefulness to mankind...

And the founders spoke early of the diversity desired in the student body:

> This Seminary shall be ever equally open to youth of requisite qualifications from every quarter.



History

Phillips Academy opened for instruction April 30, 1778, in a building which had earlier been used as a carpenter's shop. From the beginning under the leadership of Eliphalet Pearson, the first principal, the school gained in reputation, attendance and number of teachers. On January 28, 1818, during his term as principal, the schoolhouse burned and a new brick Academy designed by the famous architect Charles Bulfinch was erected within a year. This "classic hall," described in Oliver Wendell Holmes's centennial poem, "The School-Boy," and now called Bulfinch Hall, is still used by the English Department.

The modern period of the school's history commenced in 1873 with the election of Cecil F.P. Bancroft,



a man of foresight, vision, patience and shrewd discrimination, who was principal until his death in 1901. Under Dr. Bancroft's administration attendance increased from 262 to over 400 pupils.

Under Dr. Alfred E. Stearns the Academy acquired the buildings and land of the Andover Theological Seminary and in the 1920's and 1930's took its present form. During the headmasterships of Dr. Claude M. Fuess and John M. Kemper, the student body, the faculty, the physical plant and the endowment continued to grow. At the same time continual changes in educational practice and theory enabled Andover to maintain its leadership in secondary school education.

The present Headmaster, Theodore R. Sizer, formerly Dean of the Harvard Graduate School of Education, assumed his duties on July 1, 1972. In October of 1972 the Trustees of the school announced the incorporation of Abbot Academy into Phillips Academy. The combined facilities of Andover and Abbot now include almost 200 buildings on over 400 acres.

Andover is greatly enriched by the merger with Abbot. Abbot Academy was the first incorporated girls' school in New England and brings to Andover a long tradition of academic excellence for women, extending back to 1829. Sarah Abbot and Samuel Phillips, Jr. were of the same family, and the two schools have worked closely together throughout their histories. Several years of cross-enrollment in academic courses and coordination of extra-curricular activities preceded the merger.

Faculty and Students

At the heart of Andover life is the insistence on sound academic teaching, hard work and the mastery of intellectual disciplines and skills. The classroom comes first. But the Andover faculty member is more than a skilled classroom teacher. It is the ability to combine classroom teaching with the role of leader, counselor and friend that makes the Andover instructor unique. Many of the 150 teachers also coach, serve as resident house counselors for five to twenty students, act as advisors for student extra-curricular activities and serve on faculty-student committees. Faculty members are also active in school policy-making and many have achieved distinction in their professional fields.

Andover has always tried to make its student body as diversified, as able and as democratically chosen as possible. Capable applicants from minority groups and from every economic and social background are urged to



apply to the school. A good example of a minority group in the school community is the Afro-Latino-American Society. Eager to improve minority life at Andover, the Afro-Latino-American Society has its own meeting room that serves as a cultural center for minority students. The society sponsors seminars, speakers, a quarterly publication, trips and entertainment. It also actively recruits new minority students.

Andover students have only this in common: they wish to learn. Few if any other schools in the United States, public or private, have such diverse and able young people. In the school year 1973-74 the school, numbering 1147, included 39 black students, 23 from foreign countries and representatives of 37 states. Over 300 students received financial aid and travel grants.



Candidates are admitted annually to each of the four classes in approximately the following numbers: ninth grade (Junior), 122; tenth grade (Lower Middle), 148; eleventh grade (Upper Middle), 83; twelfth grade (Senior and Postgraduate), 35. Andover encourages applicants for one, two, and three year programs, as well as the full four. Andover admits students of any race, color, or creed to all the rights, privileges, programs, and activities generally accorded, or made available. The school does not discriminate in the administration of its educational policies, scholarships, and loan programs, and athletic and other school administered programs.

CURRICULUM AND ACTIVITIES

The curriculum combines a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual. Students' placement may be independent of age or grade. Students are encouraged to progress at a rate appropriate to their ability and ambition, and through advanced placement at entrance or accelerated courses, many students are able to fulfill requirements ahead of the normal year, enabling them to take college-level courses or other electives.

Andover operates on a trimester system which provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects. Classroom groups are small enough to permit individual attention: 126 teaching faculty members make 12 students the average size of a class. The curriculum is described in detail in the *Course of Study,* which will be sent to each preliminary applicant and to others who request it. Students may select their instructors, class times and sections during Arena Day which precedes each trimester.

The Library

At the center of Andover's intellectual life is the 100,000 volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually. The Copley Wing is used for reserved books and provides carrels for individual studying.

The Library subscribes to over 250 American and foreign periodicals and 11 daily papers from cities throughout the country. A microfilm file of the New York Times is available. Particular Library treasures are an original elephant folio of *Audubon's Birds of America* and the papers and books of Oliver Wendell Holmes. The science and mathematics departments have working libraries in their own buildings.

Short Term Institutes

The Complementary Schools Project is the embodiment of an idea of the Headmaster, first expressed in his recent book, *Places for Learning, Places for Joy.* Dr. Sizer believes that no single setting is ideal for all kinds of learning and that at times today's students may need new educational experiences in different places and suited to their own needs. Under the Complementary Schools Project the Ford Foundation has granted Phillips Academy funds for a two-year study of possible coordinate relationships between public and private education.

The Short Term Institutes, one approach of the Complementary Schools Project, bring day school students and teachers to Andover for a 4-6 week intensive academic program in one subject area. The result of broad consultation with school and government officials and professional educators across the country, the Short Term Institutes offer both the opportunities found only in a residential setting and intensive specialized courses. About twenty students in each Institute study under an Andover faculty member, live together in a dormitory complex and participate in a variety of cultural and social programs at Andover and in metropolitan Boston. Further information can be obtained by writing Andover Short Term Institutes, Phillips Academy, Andover, Mass. 01810.

School Year Abroad

School Year Abroad conducts programs for upperclassmen in France, Spain and Germany. Phillips Exeter Academy, Exeter, New Hampshire and St. Paul's School, Concord, New Hampshire are sponsors with Andover of this opportunity to spend a full academic year or a portion of a year learning the language and the customs of another people. Students reside with French, German or



Spanish families, carry a full academic program (permitting graduation from Phillips Academy with their own class) and travel throughout the country on weekends and school holidays. Qualified Upper Middlers, Seniors, (who will have completed the American History and laboratory sciences requirements) and postgraduates are eligible for School Year Abroad. A catalog can be obtained by writing School Year Abroad, Samuel Phillips Hall, Phillips Academy, Andover, Mass. 01810.

Other Complementary Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Students in the Man and Society course may spend a winter term of work and study in Boston or Mexico.

In addition to school-sponsored programs, many Seniors arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.

The New School begun during the 1970-71 school year is a student-run organization which offers non-credit courses ranging from macrame to karate. The idea for the New School evolved as a way of combining extra-curricular activities with learning.

The Andover Summer Session

The Summer Session makes use of all the school's facilities and is open to regularly enrolled Andover students and to able students from other public and private schools. Its purpose is to provide a summer experience for boys and girls of high school age that will deepen and extend their intellectual, aesthetic and moral interests. Courses in all subjects and at all levels demand hard work—harder work than most students have ever before experienced. Many courses offer subjects or approaches rarely found in the conventional secondary school curriculum; all courses proceed rapidly and probe deeply because the students are competent and highly motivated. The advanced courses are conducted at the advanced placement college level.

The faculty and staff are an expert and diverse group of men and women that numbered 144 in 1973. Many of the teachers come from the Andover faculty, the rest from other schools and from colleges. The Summer Session admits boys and girls who have done well



academically and who have completed the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing The Andover Summer Session, Phillips Academy, Andover, Mass. 01810.

Activities

Another important aspect of education at Andover are extra-curricular activities. Some are course-related, such as the Computer Club, the Latin Play and Science Experimenters. Many are not; these include the various school publications, the political organizations and the radio station. Other active groups are the Pre-Med Club, the Student-Alumni Association, the Chess Club, the Coin Club, the Stamp Club, the Sailing Club, and Philo, the debating society. Members of the Andover Tutorial Program are students who give tutorial help to fellow students who are having academic problems, mainly in math, science and foreign languages.

Andover also believes in the importance of off-campus experiences that give students a change of pace, contribute to their awareness of social problems and invite them to meet the needs of individuals and groups outside the school. The Community Service Program arranges placement in area hospitals, city or suburban elementary schools, youth centers, a school for emotionally disturbed children and other agencies. Students participate in their own free time, as an activity in lieu of athletics or as an independent study project. One student may tutor an hour a week in a nearby elementary school; another may spend four hours every weekend in a Lawrence hospital or help to bring a dozen fourth graders from South Lawrence to Phillips Academy for weekly recreation or classroom enrichment. Another boy or girl may be intensely involved in a bilingual classroom in Lawrence or with an emotionally disturbed child at St. Ann's Home. Over one hundred students were involved in community service during 1973-74.

The Solid Waste Action Group collects newspapers, magazines, cans and glass for recycling. In 1973-74 SWAG earned $883.00 by collecting over 33 tons of newspapers, 235 bags of cans and five and a half tons of glass.

Upperclassmen may elect for one term to be in-







volved in the Activities Program instead of the usual afternoon athletic activities. Some popular choices have been ceramics, chess, music, photography and woodworking. Other groups of students have worked as a stage crew or explored the dynamics of "decision making."

ANDOVER LIFE

Andover is a large and active place which constantly generates the feeling that "things are happening." Course work is fast-paced and involves about twenty-five hours of outside preparation each week. In addition there are approximately six hours of athletics and, for Uppers and Lowers, three hours of the school work program per week. Most students also become much involved in extra-curricular activities and social events. Decisions about the use of one's time are largely left to the judgment of the individual, for the school encourages independence and personal responsibility. There are no study halls, and students may use their free time as they wish.

Andover is a thirty-minutes' drive from Boston and Cambridge, and buses run hourly between Andover and downtown Boston. Students have easy access to the historical, cultural and entertainment offerings in the greater Boston area, and to Logan Airport for vacation flights home. Frequent trips are scheduled to the Boston Symphony, other concerts, movies, plays and sports events. Most students are eligible to take a day excuse each week; after the first two weeks of the school year overnight excuses are permitted. Seniors may take two, and underclassmen one, extended weekend excuse in the winter and spring terms.

The School Day

There are five class periods of forty-five minutes each in the morning, and another two in the late afternoon. An individual is likely to have two morning periods and one afternoon period free each day, though the number and time of free periods depend on the scheduling of courses.



> There is a constant learning experience going on just by living at P.A., away from home and among such individualistic people.
> —Diana Van Anda '75

Athletics or an afternoon activity usually take place after lunch until about 3:30 on Monday, Tuesday, Thursday and Friday. On Wednesday and Saturday varsity and junior varsity teams often have outside competitions. After dinner there is time for extra-curricular activities and recreation. At 8:00 all underclassmen must be back in their dormitories or in the library, language lab, computer room, or audio-visual center. Seniors need not be back until 11:00. Bed hours are regulated for Juniors.

Wednesdays and Saturdays are half holidays with no afternoon appointments. On alternate Saturdays there are no morning classes. Sunday is totally free. On these days there is time for independent study, for special projects, informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Movies, dances, concerts, plays and other social events take place Saturday evenings. Social events during the week are limited by the demands of the academic program, but the weekends on campus abound with dances, concerts, movies, plays and informal activities.





“For the most part teachers are open, friendly and able to relax casually with students—even eat meals with students!!
—George Kirchwey ’75”

Meals are served in Commons, the central dining hall composed of four dining rooms and two serving areas, and in a separate dining hall serving the Abbot Cluster. During the week breakfast is served from 7:15 to 8:15, lunch from 12:30 to 1:15 and dinner from 5:30 to 6:15; on Sunday the first two meals are served somewhat later. While meals are not required and there is a snack bar on the campus, most students find it convenient and economical to eat regularly at one of these dining halls.

The Clusters

The dormitories and houses in which boarding students at Andover live are grouped into six units called “clusters” which serve as administrative and social subdivisions of the school. The cluster system is the heart of Andover’s living arrangements. The purpose of the cluster is to create the personal atmosphere of a small community in which everyone knows everyone else and people do things together. It brings the advantages of a small school to an institution that already has the advantages of size. The clusters, each of about 170 students from all classes, have considerable independence. Teachers and students together manage their own affairs under the leadership of the Cluster Dean. The clusters are the focus of a variety of activities such as lectures, seminars, off-campus service projects, social events and intra-mural athletics.

Dormitory life is for many students one of the most valuable aspects of their time at Andover. Dormitories and the smaller houses adjoin the apartments of house counselors and their families and although these buildings are somewhat varied in size, all are small enough to encourage close relationships among students and between student and house counselor. The person who lives in the next room may well come from a very different background or part of the world. Students generally re-

main in the same cluster during their years at Andover and form continuing relationships with the faculty and other students there.

Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has, or they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that freedom for the individual can be achieved only within a social order. The school tries to keep rules to a minimum, and they are reviewed annually by a committee of students and faculty.

Each student has a faculty counselor or houseparent who lives with his or her family in the dormitory and who is available for advice and assistance. Parents can expect to hear from the house counselor at regular intervals, as this faculty member works closely with students in the dormitory on both the personal and academic level. Parents are encouraged to turn to the house counselor for information regarding a student's progress.

Each Cluster Dean supplements the work of the house counselor and is available to students and parents for information and counsel. The academic advisors help students in the cluster plan their academic programs. Full-time Co-Directors of College Placement and their staff assist all Seniors with their future plans.

Discipline is handled at the cluster level and may involve the Cluster Dean, house counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of the school community and continued infractions that indicate an unwillingness to come to terms with the demands of the school all render a student liable to dismissal. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds.

Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission. Boys and girls who feel they could not live happily with these rules should not apply for admission.

The Work Program

The work program, in which every Lower and Upper takes part, is designed to develop a sense of community responsibility for the daily operation of the school. It assists the school in reducing its expenses and makes it possible to lower stuednt fees. Students, working about three hours per week, share the jobs of keeping the campus free of litter, shoveling snow, returning books to the library stacks, operating audio-visual equipment, serving as office helpers, messengers and laboratory assistants and performing other essential tasks. In addition all students are responsible for the daily care of dormitories.

The Clusters take turns each week working in the dining hall, Seniors and Uppers serving as overseers. Seniors have other supervisory roles: proctoring in dormitories and, as members of Blue Key, organizing the welcome and orientation of new students in the fall.

“

Andover is a complete school. It is big enough so one can meet many different types of people, but small enough so one doesn't feel lost. For the years you attend the school it is your life. Here, you meet your true friends and have some of the best times of your lives. Diversity is perhaps the best element of the school. There are countless things to do if you look.
—Mark Forsyth '75

”





THE ARTS

The Arts and Communications Center never seems to shut down. Of course there are many studio classes going on during the day and the audio-visual facilities are used both day and evening, but aside from regular students there are bottle-cutters, hi-fi cabinet makers, rabbit-hutch designers and many other craft-conscious young people working almost every evening of the school year. Members of the Art Department welcome this kind of activity as well as that related to courses, and faculty members are on hand each evening to encourage the idea that whether it's sculpture or bicycle repair, the Arts Center is the place to go.

In recent years art facilities for ceramics, painting and printmaking have expanded to the former Abbot campus. Filmmaking and video have their own small building. The number of students involved with the visual arts has increased enormously in the last decade, and the projects undertaken have varied from traditional media to the design of toys, small kinetic sculptures that crawl around the room, puppet-making, rear-projection events and applied video. Last year the architecture class designed and built a playground for a local nursery school. The year before it built a twenty-foot practice climbing tower for the Search and Rescue group. Superb facilities—fully-equipped wood and metal shops, two complete darkrooms, print-making equipment, several painting studios—enable students to carry out such projects. The kinetics studio is a maze of wires, gears, motors. Ceramics has the use of several kinds of kilns: electric, gas-reduction, wet-firing, and a salt-kiln now under construction. The photography program, probably our most popular art activity, includes studio photography, documentary photography, and photographic silkscreen. "Eidolons," which means "images," is the school's magazine of photographic communication and is run entirely by students. It publishes each year work by the many photographers in the school community.

Andover attempts to balance informal problem-oriented courses like Visual Studies and the more adventuresome independent projects of advanced courses. Four years of formal courses are offered, but students are welcome at the Art Center just to have some fun and learn how to put something together. A partial list of courses suggests the range of the Art Department: Ceramics, Documentary Photography, Painting, Print Shop, Architecture, Art History, Filmmaking, Sculpture, Kinetics, Three-dimensional Design, Drawing (including Life Drawing).

The sculpture courtyard, located just outside the Arts Center, is gradually filling with welded sculptures—one of which is fifteen feet tall. Last year the film class cooperated in scripting and filming a version of Salinger's *Catcher in the Rye.* Student graphics have been accepted for publication in the *Andover Review*, Phillips Academy's new publication on secondary education. One of the most exciting recent events on campus was the Bradley Arts Festival. Students from fourteen schools congregated for a weekend and exhibited art work, performed dramatic and musical pieces, and camped out in the Cochran Sanctuary in improvised structures brought along and erected for the occasion.

Addison Gallery

The Addison Gallery of American Art, which now includes nearly 2,000 acquisitions, is recognized as one of the outstanding specialized collections in the country. Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LaFarge, Ryder, Twachtman and Whistler. The early part of the



present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keefe, Pollack, Shahn, Wyeth and others. This year the Gallery has instituted a set of seminars, organized by students, which brings artists on campus to meet with young people interested in art.

Filmmaking

Filmmaking and videotaping are important activities at Andover. There are courses that study "The Western," "The Gangster Movie" and that deal with European films or the American Underground. In Film Study and Literature and the Movies students write papers, do video exercises in imitation of film techniques and examine movies in the context of literary and artistic traditions.

In the two sections of Filmmaking, individual students make movies: sketches of a roommate, short documentaries, personal fantasies. There are also longer, more elaborate story movies, sometimes requiring an entire class to handle the technical difficulties of sound, lighting and acting. And there are projects, done primarily on videotape, which help other people in the community: studies of a dancer practicing, of a teacher doing an experiment, of an athlete working on his technique in the hurdles.

Theatre

Courses in theatrical production, a series of term-contained courses in directing, acting, stage lighting and design, and a year-long major, Plays in Production, in which students become involved with all areas of production on the amateur stage, are very popular. The courses combine classroom and workshop sessions, students working out practical theatrical problems together under the guidance of the instructor. At Andover it's a rare week that doesn't see two or three plays in production, many of them written, directed or produced by students. Students may do theatrical work as an extra-curricular activity; or they may join one or more of the theatre courses in directing, scene design and stage lighting, acting and production.

The main stage in George Washington Hall plays to audiences of over one thousand. It is a flexible, professionally equipped proscenium stage recently remodeled and modernized, whose dramatic and technical possibilities are vast: it is complete with a full fly system, accommodation for innumerable lighting instruments and an elevator/pit. Adjoining the stage are a fully equipped scenery workshop (where sets are constructed by students and faculty), dressing and make-up rooms, and storage areas. Each major show uses a full stage crew, membership in which is open to students as an alternative to athletics. In addition to innumerable lesser efforts, the main stage is the location of three or more major productions each year: comedy, drama, a Shakespearean play, a musical comedy (in collaboration with the Department of Music). The versatility of the main stage has encouraged many demanding productions; among recent performances are *Rosencrantz and Guildenstern Are Dead, Richard III, Antigone, The Madwoman of Chaillot, A Man for All Seasons, Guys and Dolls, Kiss Me Kate,* and *A Cry of Players.*

The Drama Lab, where some of the most exciting and innovative work goes on, is an intricate arena/workshop theatre with excellent lighting facilities, suitable for audiences of less than 100. The major main stage plays are usually directed by a member of the faculty; the Drama Lab provides opportunity for students to direct plays themselves and to experiment with dramatic styles. The Drama Lab will take nearly any shape the

imagination of the director and cast can conjure up. Here some twenty or more plays can be produced each year, representing a range of theatrical types and styles. A sample from the past few years includes *Lysistrata, The Glass Menagerie, Everyman, America Hurrah, The Homecoming, The American Dream, The Three-Penny Opera* and *No Exit*. The school has other potential acting areas, indoors and out, including the steps of Samuel Phillips Hall and the green lawns of the campus which are often used by imaginative directors.

Music

Graves Hall, a huge old three-storied Victorian brick building complete with turrets, heraldry, love seats and waste space, is one of the oldest classroom buildings on the campus. Recently renovated and reconstructed, it serves as a fine music building. It has two large rehearsal halls, one for the Concert Band and one for the String Orchestra, and many individual practice and ensemble rooms, each containing a practice piano, one music classroom and three teaching studios; it also houses the finest musical instruments and stereo equipment. The Music Department has a large and up-to-date record lending library and listening room. A short distance away is Cochran Chapel, where the Chorus has a fully equipped rehearsal room with a library of music literature.

The Music Department faculty consists of four full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, woodwinds and percussion.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He may also, for a nominal fee, study privately. He may take the beginner's course, Music Perception, offered each term. A more advanced four-part course, Theory of Music, runs in sequence throughout the year.

For beginners and advanced organ students Andover makes four instruments available. In the main sanctuary of the chapel is the Casavant Organ. The chorus rehearsal room has a practice pipe organ, and the Sylvia Kemper Memorial Chapel has a fine reed organ. The Meeting Room of George Washington Hall has a Hammond organ.



For the student who is sufficiently advanced, Andover has many musical organizations in which to play or sing, either on a credit or a non-credit basis. Small ensembles of strings, woodwinds, brass and madrigal singers, as well as a large jazz band made up of players from the Band and Orchestra, rehearse and perform many times during the year. The Mixed Chorus combines with other schools in presenting major works. The Academy Singers, for those who cannot make a full-time commitment to the Chorus but who would like to sing, is open to students, faculty, staff and their families and performs with the Chorus about once a term. The Fidelio Society is made up of outstanding singers from the Mixed Chorus. The Chamber Music Society plays for its own enjoyment and also gives school recitals. The Orchestra plays often in concert and appears with the Chorus several times a year as accompanist. In the spring as a pit orchestra it accompanies the annual Broadway musical. The Jazz Band is open to any qualified instrumentalist or vocalist and plays all styles of music written for stage band. The Pep Band plays for football games, and the Concert Band gives formal concerts at Andover and neighboring schools.

The Bell Tower, a focal point of the main campus, houses a thirty-seven-carillon that is played by the stu-

dent who wins the Fuller Music Prize, an award of $350 a year. Duties consist of playing the carillon a number of times each week and on special occasions. In the Music Building there is a duplicate practice keyboard of the carillon for those who want to learn to play.

The school is so close to Boston that advanced students may study privately with members of the Boston Symphony Orchestra, instructors at the New England Conservatory of Music or other specialists in the Boston area. Also in Boston is Berklee College of Music, one of the outstanding centers in the United States for jazz instruction. Andover students have many opportunities to attend musical performances either at the school or in the city: the Boston Symphony Orchestra, the Metropolitan Opera on tour, classical concerts, jazz workshops and rock concerts.



THE CLASSICS

The study of Greek and Latin challenges students to examine evidence and to develop powers of independent thought and the awareness that the social, political and economic problems that confront us today have appeared many times in human history. Through the study of classical languages, students establish a firm basis for humanistic studies in their own language and literature. By reading ancient authors they may learn what constitutes a "classic" and what the classics mean today.

Each year students produce a Roman comedy. These have usually been plays by Plautus, and in recent years have included *Captivi* (The Prisoners), *Mostellaria* (The Haunted House), *Menaechmi* (The Two Brothers), *Curculio* (The Parasite), *Pseudolus* (The Crafty Slave), and *Rudens* (The Rope). Andover students have also produced two tragedies in Greek, Aeschylus' *Oresteia* and Sophocles' *Ajax*.

Latin for centuries depended more on the spoken than the written word, and oral tradition is celebrated at Andover in an annual Latin declamation contest. For students interested in knowing how Latin developed and changed, an informal course may be offered in the study of Italian through Latin. Mature students are encouraged to undertake independent projects of their own choosing on a tutorial basis. Greek dinners bring together students who are at different levels of study in the Classics.

Ever since its founding Andover has had a long line of distinguished teachers of classical languages. In recent years members of the Classics Department have published textbooks, both in Latin and Greek, for use in secondary schools. Latin and Greek classes at Andover are held in Pearson Hall, one of the oldest buildings on campus. Designed by Charles Bulfinch, it was dedicated in 1818 as part of the Andover Theological Seminary and since 1908 has belonged to Phillips Academy.



ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm requirements for the diploma. A student must prove himself competent in writing and reading and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, his opportunities multiply. He may enroll in any of the Literature Sequence courses that he has not yet taken; he may study any of the more than twenty-five advanced or specialized courses offered by the Department; he may become a member of one of the reading seminars; if he is a Senior, he may qualify for an independent project supervised by the teacher of his choice.

The Department also serves the needs of less advanced students. Tutorials are offered for training in the fundamentals of language. For foreign students, a specialist teaches English as a Second Language. The normal course for Juniors (ninth-graders) is Perception and Expression, designed to increase the students' awareness of the world around them and to introduce them to the arts of communication.

The walls that used to separate academic departments are crumbling. Many courses in the Performing Arts, most notably in Theater, are taught by members of the English Department. Most of the Interdisciplinary Courses are related to English studies. A course in English etymology is taught by the Classics Department. And several of the Foreign Language departments offer courses about their literature in English translation.

But the fundamental requirement does not change. Every student who graduates from Andover has either



passed the Competence Course in the basic skills of writing and reading or has proved himself competent on the departmental examinations.

Throughout the year the English Department sponsors trips to theaters in Boston and Cambridge, and several times each term brings writers and scholars to the campus to meet with students and faculty. Recent visitors have included Robert Penn Warren, Eleanor Clark, Anne Sexton and Professors Louis Coxe and Leo Marx. Students are further encouraged to exercise their analytical, oratorical and creative talents by competing in the Department's ten different prize competitions.

Many extra-curricular activities are related to the study of English. A strong and wholly uncensored weekly newspaper, *The Phillipian,* offers many opportunities for journalistic writing, photography and business management. *Cynosure*, a monthly magazine of editorials, attempts to express the diverse opinions of the Andover community. Though the school literary magazine, *The Mirror*, is basically a magazine or poetry and fiction, it also publishes graphics and photographs when it comes out three times a year.

The staff of the *Pot Pourri*, the school yearbook, describes its publication as "the chief permanent record to which alumni turn for an account of their years at Andover." It represents a long-accepted tradition: the poignant documentation of the events of the school year. The staff, however, does not restrict itself to an objective viewpoint. It tries to create a yearbook which reflects the changing moods and emotions of the Senior class in their final year at Andover.

WPAA-FM is a student-run educational FM station licensed by the FCC. It has superb equipment for a station its size and provides 58 hours per week of news, music, sports and educational programs to an area with a population of about 200,000. It is a member of the National Public Radio Network; its studio and transmission facilities are located in Evans Hall.

A term-contained course in public speaking, available all three terms, is an elective for Seniors and Upper Middlers. It provides training in voice production, articulation and speech making. Impromptu and prepared speeches help the student to develop poise, fluency and force. The Philomathean Society, founded in 1825, is devoted to discussion and debate. Membership is open to all who are interested in any form of public speaking or the discussion of ideas. Philo holds special classes in debating technique for the benefit of novices. Regular

meetings provide forums for the discussion of local, national and international issues. The Society has just recently expanded its program to include model United Nations activities. From time to time there are debates with visiting teams and once a year a Prize Debating Contest. The organization also sponsors visiting lecturers and discussion leaders to stimulate interest in economic, social and political problems.

The Press Club is a group of students interested in getting the news of Andover's athletic achievements into the newspapers. The club is one of the few that is always busy every Wednesday and Saturday as the members report the scores of all the athletic events to area newspapers. Students with an interest in sports reporting gain valuable experience as they write stories and report on the events.

During the winter and spring of 1974 about 50 boys and girls became involved with the Andover Tapes, a project designed for "creative sharing through media of information and perceptions about Andover." Topics ranged from "Spring Fever" and "A Day at P.A." to "Computer Pictures" and a "Search for School Graffiti." Slide tapes, sculpture, video tape, prints and written material—journals, newsletters, creative writing, essays—were used to record and create these portraits.

HISTORY AND SOCIAL SCIENCE

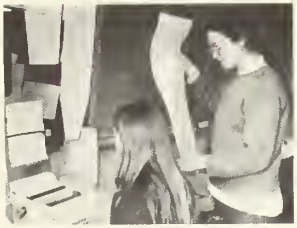
The thirty-one courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from modern art to primitive cultures, from the American family to utopian societies. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democracy such as ours, and on the hope that once interest in the story of man has been kindled, it will be pursued for the rest of an individual's life.

The courses for the two lower classes are generally short, term-long introductions to different aspects of man's experience: how the physical world affects him (Geography), how human societies originated (Anthropology), how man makes a living (Economics), how man tries to regulate the society in which he lives (Government). The work of individual men is explored through three courses in biography—American, European, and Asian. None of these courses—in fact no course in the department—uses a formal textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies and slides.

A requirement for the Andover diploma is the year-long survey course in American History. The course emphasizes discussion and interpretation based on close reading. In the Spring Term students choose their own topics for an extensive paper; they are encouraged to use the raw materials of history—newspapers, letters, diaries, interviews. One student wrote a paper on the attitude of the *New York Times* toward the Russian Revolution; another edited the diary his great grandfather wrote while on a voyage to Zanzibar.

For upperclassmen there is a smorgasbord of courses, including a course on the history of Women from ancient times to the present; for Asian enthusiasts there are courses on India and Southeast Asia; for city-oriented students, courses on the growth of the American city.

The department also offers four courses that involve off-campus study. Well qualified students in the American History survey courses may spend the Spring Term in Washington, working as an intern in the office of a Senator or Representative. Some of these interns have been hired by Congressmen for the following



summer. Students interested in problems of the modern American city can spend the Winter Term in a settlement house in Boston, studying at first hand the issues they have read about during the Fall Term. Students interested in modern Mexico can work and study in that country, living for a term with native families. And finally, those concerned about the effectiveness of American education can investigate the subject first hand as teaching assistants in local public schools.

Each year new courses in History and the Social Sciences are developed, old courses revised or discarded. New members of the department broaden the course offerings with their own special interests. The department believes that each of its eighteen members will generate excitement in their own fields of exploration so that the variety of courses offered each year reflects individual Andover teachers. We were pleased that Michael Harrington, Tom Wicker, Jimmy Hoffa and Robert Coles visited and spoke at Phillips Academy during 1973-74.



MATHEMATICS

The opportunity to study mathematics at Andover is limited only by the interest and capacity of the student. The teaching staff has had a wide variety of training and experience. Some have been engineers, aviators, naval deck officers, navigators, musicians, athletes, or chefs, and all have been well trained in mathematics, most of them having at least a master's degree in their field. They are men and women who have contributed to the teaching profession by writing textbooks, by writing articles for journals, by serving on committees of such national organizations as the National Council of Teachers of Mathematics, the School Mathematics Study Group, the College Entrance Examination Board Committee, and the African Education Foundation. But more important, they are devoted to teaching a subject which they find fascinating and which they wish to make fascinating for others.

Besides the standard sequential courses the department offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Faculty in the department are always willing to guide students in individual projects. Projects have in the past been in such fields as probability, computer programming, computer assembly languages, the theory of numbers, advanced geometry, linear algebra and Markov Chains.

The required sequential courses involve algebra, geometry, logic, statistics, computer programming, elementary functions and elementary probability. The trimester system allows each student to enter the sequence at the appropriate level or even to skip courses in the sequence by demonstrating a grasp of the material. The elementary and advanced elective courses include the study of limits and sequences, mathematical models, elementary and advanced calculus, analytic geometry, differential equations,

probability, statistics, computer analysis, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which was completely remodeled in 1964. It houses the campus computer center which offers time sharing in the BASIC-PLUS language through six public terminals. Instruction and practice in the use of the computer is given in the required course sequence. The computer is a PDP-11 manufactured by the Digital Equipment Corporation.

Over one-third of all mathematics at Andover is taken electively, much of it in preparation for the Advanced Placement Examination. In 1973, 87 students took the exam. A number of students also take courses in Cambridge at Harvard and at the Massachusetts Institute of Technology. The community of students who like math at Andover is sizeable, and they share their curiosity and knowledge by offering to tutor other students at the school. The Math-Computer Club stimulates interest in both the use of the computer and in the recreational enjoyment of math. The club has taught students without previous experience how to use the computer and has also arranged lectures on math and computer-related topics.

MODERN FOREIGN LANGUAGES

Knowledge of language is the key to communicating with and understanding other people. Foreign languages open the door to other countries and cultures and encourage cooperation between nations. The modern foreign languages offered at Andover are French, German, Russian, Spanish and introductory Italian.

In the first years Andover emphasizes understanding and speaking, and the foreign language is used in the classroom from the first day. Small classes of not more than fifteen students allow each individual the chance to speak

> "You can't disregard the academics of Andover, because it is their intense pace that electrifies our school . . . time is very precious. No one has time to sit back or just do nothing. If one enjoys the fast pace, Andover is great. I do.
> — Kirk McDowell '75"





often. An extensive language laboratory makes frequent aural-oral practice possible.

Some courses are specifically designed to allow rapid advancement from one level to the next; a student enrolled in one of these courses may accomplish three years' work in two. Courses at the 4th, 5th and 6th year levels may include the study of the art, history, geography and literature of the foreign country. Students may prepare for the Advanced Placement Examination in fourth and/or fifth year courses and then may be able to advance directly into upper level courses at college.

Further opportunity for accelerated learning is offered by School Year Abroad programs in France, Germany and Spain. (See page 9). Programs in Russia and South America are also being planned.

Students, particularly Seniors, may wish to pursue an independent project with the modern language faculty. The project is planned by both student and tutor. Apprentice teaching with a beginning language section has been a popular project for advanced students. Girls and boys may compete in national language prize examinations, and Andover students have consistently done well in these competitions. Language clubs, foreign language plays and movies, and trips to museums all have generated interest in the language program.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States, as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and enables him

to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

The Andover student may at the third year of French elect any sequence of trimester courses in literature, civilization or intensified language study. In the fourth, fifth and sixth years this study can continue in greater depth. School Year Abroad offers a year in Rennes and a one term program in Dijon. A six-week Short Term Institute immersion in French provides further curricular options. A weekly *Veillée* and a radio program on WPAA give students the opportunity to speak under different circumstances outside the classroom.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Its 100,000,000 speakers embrace not only the populations of West and East Germany and of Austria but also three-fourths of Switzerland. In addition, at least 20,000,000 people speak German as a second language in Holland, Denmark, Sweden, Poland, Czechoslovakia, Hungary, Yugoslavia, northern Italy and eastern France. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism (Marxism) and democracy in the world. Many of the most important developments in modern physics (Einstein's theory), electronics, chemistry and engineering were originally published in German, and American businesses have realized the importance of personnel able to speak German. Germany's leading role in the European Common Market has contributed greatly to the importance of the German language.

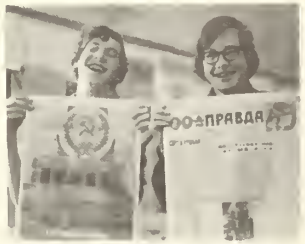
Russian

Let's help build bridges! Astronaut Don Slayton is helping. He is learning Russian in anticipation of an historic rendezvous in space with the Soviet Union. Our government is helping. It has recently signed treaties which reflect a new spirit of cooperation and mutual respect between the Soviet Union and our country. Together we shall attempt to pursue unsolved problems in medicine, ecology, education, international law and trade, to mention a few. One manifestation is a mutual "think tank" now in its embryonic stage yet destined to play a significant role in the well-being of all our citizens.

Nickolai Shestakov is helping. He is Principal of School No. 1 in Minsk, U.S.S.R. Mr. Shestakov recently spent several weeks at Andover. He and our community mutually discovered friendship, respect, and a willingness to cooperate. We expect that this working relationship will result in an early exchange of teachers and students between our schools and communities.

Approximately 40% of Russian secondary school students are learning English. The Soviet Union has many special secondary schools for English in which the major portion of the curriculum (mathematics, science, etc.) is instructed and conducted in the English language. Meanwhile, a fraction of 1% of American secondary school students study Russian, but secondary school is the best place to begin Russian, unless, of course, your mother is Russian, or you are so fortunate as to attend an elementary school offering Russian.

As increasing numbers of participants become involved, will our doctors, legal experts, scientists, educators and businessmen be obliged to carry on all mutual investigations with Soviet counterparts in English? Cer-





tainly from the standpoint of mutual respect, this would be a poor beginning.

The obvious solution is an increasing pool of intelligent young American men and women who are not necessarily training to become Russian specialists or translators, but doctors, lawyers, educators, scientists and businessmen who also know the Russian language.

The Russian Department, with four instructors, most of whom have traveled and studied in the Soviet Union, offers four full years. Well-motivated students of average verbal ability may elect Russian in their Junior year as a first foreign language with complete confidence. Russian as a second foreign language is also a popular choice.

Spanish

Not only does the United States have social, cultural and economic ties with Spanish-speaking nations to the south, but we also have many areas within the country in which Spanish is used more frequently than English. The presence of Spanish-speaking students at Andover gives everyone an opportunity to use Spanish on the campus.

The Spanish Department offers the regular four year study program as well as additional years through acceleration or through School Year Abroad in Spain. Many graduates of School Year Abroad are now studying Spanish in college, helping Spanish-speaking people in the United States or are goodwill ambassadors in Spain and in Spanish-American countries. In the past few years Spanish students at Phillips Academy have been an important part of the Lawrence Tutorial Program, the South End Project in Boston and the Man and Society course in Leon, Mexico. Their knowledge of the Spanish language has been an important asset to instructors and participants in these projects.

RELIGION

The study of religion at Andover is not a moral training exercise in which students are indoctrinated with a particular point of view. It is an opportunity to consider religious, philosophical and moral questions that confront us, to study the intellectual, existential and spiritual ideas of the past and of today. Some of the courses offered in 1973-74 were The Voice of Prophecy, Religion and the Human Situation, Ethics in Contemporary Society, Existentialism and Philosophy, Introduction to World Religions, The Old Testament, The New Testament.

Any student who wishes to do so may join the Chapel Council. The members of the Chapel Council assist the school ministers in the Sunday Services, serving as ushers, helping in the serving of communion and deciding the distribution of the morning offerings, which are given to worthy organizations.

Worship services at Andover are available for all who wish to participate. The Protestant service is conducted at 11 o'clock on Sunday mornings in the Cochran Chapel. A Romen Catholic mass is celebrated at 10 o'clock on Sunday mornings in Kemper Chapel. The Jewish student congregation often has services on Friday evenings.

Jewish activities are planned, coordinated and promoted under the leadership of a student Jewish Activities Board. In addition to services and holiday observance, all students who are interested may help with a drive for the Israel Emergency Fund; the Board also plans occasional Sunday morning breakfasts or other gatherings.

The Newman Club is the campus organization serving the spiritual needs of the Andover Catholic community. The club oversees Masses celebrated by a priest from Merrimack College on Sundays and Holy Days. Folk masses, seminars and breakfasts are also sponsored by the club.

A Fellowship of Christians meet regularly for discussion, study and prayer. The Fellowship has not only carried on its own program at Andover but has maintained contacts with other groups elsewhere through joint meetings and conferences. An integral part of the worship experience at Andover is the retreat program, a time when students and faculty may spend a weekend together at Cape Cod or in New Hampshire for conversation, recreation and confrontation with ancient and contemporary ideas.

Andover will offer a new course in Philosophy beginning September, 1974; this addition to the curriculum is made possible by the Abbot Academy Association, a group which funds extra and experimental programs at Phillips Academy.

SCIENCE

Archaeology

The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last 75 years and has published many reports of its scientific investigations. The staff of the Foundation offers Andover students an introductory term-contained course in archaeology in the fall term. The course deals with the prehistoric development of civilization in the four earliest centers: Mexico, Peru, China and the Near East, as well as with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum assist in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources. A summer field school for high school students and college undergraduates has been



"Most of Andover's faculty love teaching the subject they teach. Above the diploma requirement level, classes are composed of highly motivated and able students which allow teachers to explore their favorite subject to the fullest.
—Earl Killian '75"

held in conjunction with recent research in Mexico. For the past four years a short field trip for Andover students has been organized during the winter to visit important archaeological sites in Mexico.

Present research is concerned with the origins of agriculture and the concomitant rise of civilization in the New World. Major publications based on the analysis of these materials are now being printed. Continuing research programs are planned for Mexico, Peru and possibly, in the coming year, China. The Peabody Foundation is under the direction of Dr. Richard S. MacNeish, a member of the National Academy of Sciences of the United States.



Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to the basic biology course, the department offers advanced level courses in ecology, animal behavior and advanced placement biology. The basic course gives students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides and films are all part of the course.

Animal Behavior studies wild life in eastern Massachusetts. The course plans field trips to the coast, salt marshes, lakes and wooded areas within a few hours of Andover. Every student undertakes a serious study of some common animal. In the past students have worked with chickens and ducks raised in the school incubator. Some have studied the breeding patterns of Canada geese in the Cochran Sanctuary. Others have studied territoriality in tropical fish, and in sparrows, and dominance and aggression in chameleons. Still others have studied the mating behavior of captive ring-necked doves.

The term-contained ecology course begins by presenting a solid foundation in the basic concepts—energy flow, nutrient cycles and population dynamics. The ways man has affected and disturbed his environment are the main topics of the remaining two-thirds of the course. The laboratory is well equipped to test water for pollutants. Demonstrations and micro- and macroscopic studies of communities are also included in the course.

An advanced biology course prepares older students for the Advanced Placement exam. The material offered by the basic biology course is reviewed, and new concepts, techniques and examples are also presented. The labs give students experience in the techniques of centrifugation, chromatography, electrophoresis, spectrophotometry and statistical analysis.

Informal field trips are held throughout the year for interested students who may or may not be currently enrolled in a biology course. Many of these trips are concerned with bird identification along the Merrimack River in Newburyport, where students may see over one hundred species of birds in one day. The Biology Department has many pairs of binoculars available for student use and a telescope which is useful on extended field trips. The small zoo in Evans Hall is maintained by students. Its population varies with student interests and the reproductive rate of the animals. Currently there are fifteen rats, twenty-five mice, five gerbils, six frogs, two chickens, one boa constrictor, one alligator and one snapping turtle. Some of these animals are used for student projects; others are just fun to have around as pets. Occasionally a student takes the boa for a walk around the science building; friendly "Jake the Snake" has an affection for anyone he can coil around. The department is equipped with a phase microscope and several camera attachments for studying photomicrography. In the basement of Evans Hall we have an extensive bird collection on loan from Harvard University.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those inter-





ested in photoperiodism. Facilities are also available for the study of many aspects of bacteriology. Independent study is encouraged, and, indeed, is the basis of several of the term-contained courses.

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, draw many species of small land birds and provide nesting places for grouse and pheasant. Other areas are set aside for student projects such as demonstration of bird feeders, experimental plantings for attracting birds and soil studies. Special paths are designed and planted to show local ferns, wildflowers and trees in their natural habitats. The Log Cabin, a rustic building with a large stone fireplace, kitchen, flagstone terrace and broad lawns, is an attractive setting for social events in all seasons.

The Natural History Club organizes field trips to fresh and salt water marshes, quaking bogs and other typical New England habitats. In recent years it has acted as the ecology lobby on campus fighting to maintain the quality of the human environment and to heighten the community's awareness of current developments in this area. Working with students from neighboring schools and adult members of the community from Andover Ecology Action, the Natural History Club has been instrumental in developing the town's recycling program, in banning the use of certain pesticides, and in preserving natural areas of the town of Andover.

Chemistry

The Chemistry Department offers several full-year introductory courses at various levels. Chemistry 43,44 and 45 enable students to continue work in chemistry after completing the first course.

Students have undertaken many special projects in the well stocked laboratory. For example, one student recently investigated the "Miller experiment," the synthesis of amino acids by electric discharge through methane, water vapor and ammonia. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Two students have studied organic qualitative analysis as an introduction to the chemistry of organic functional groups. Although qualitative analysis has been included in the latter part of many elementary courses in organic chemistry, this may be the first instance of its use at the very beginning.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including five Mettler single-pan analytical balances. There are instruments which enlarge the scope of feasible projects – a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Convenient access to the computer (PDP-11, resource time-sharing system) in the Mathematics Department is provided by a teletype terminal located in the Chemistry wing of Evans Hall.

Physics

The Physics Department teaches four basic courses of various degrees of difficulty. All require laboratory work and consist of classroom demonstrations, discussions and problem solving. It also offers courses in earth science, meteorology, astronomy, physical science and the history of science for younger students, as well as electronics, astronomy and college level advanced placement physics courses for older students.

Project work may be done for credit or merely for one's own satisfaction. In recent years students have transmitted conversations by means of laser beams and built a Van de Graff proton accelerator. One boy worked on holograph experiments; another built his own electronic calculator. Other students have used sophisticated equipment to measure the velocity of light, determine Plank's Constant and perform experiments of their own design.

The Astronomy Club has a six-inch Brashear refracting telescope mounted in a dome on top of Evans Hall and an eight-inch Celestron telescope. Equipped with a new clock drive, the Brashear telescope can be used for both visual observating of the planets and stars as well as deep sky astrophotography.

The Model Airplane Club provides facilities for the construction of model aircraft and a meeting place for students with an interest in flying both model and real aircraft. The club offers three kinds of flying activities—free flight, control line and radio controlled airplanes—and tries to fly at least once a week during the fall and spring, though limited to control line model flying in the Cage in winter time.

The fifty-year-old Amateur Radio Club can provide all the necessary theory, teaching and equipment to help a student get a novice (or higher) license. Members of the Mechanics Club may bring to the school a car or motorcycle to work on during the year. The club also sponsors its own projects: working on faculty-owned cars or a vehicle purchased by the club. For all "rockhounds" the Mineral Club organizes field trips. In a room equipped for the sorting, listing and polishing of minerals, the Mineral Club plans case displays of collections.

Psychology

The Psychology Department was originally formed to provide specialized counseling to students. It still offers these services but recently has expanded to offer two courses in Psychology. The first is a Human Relations course for Seniors who are interested in learning about human social behavior by studying their own experiences in a small group. The second is a Human Awareness course for underclassmen interested in learning about the psychology of human behavior and development, especially as they relate to life in a residential school.

Individual instructors in the department welcome the opportunity to discuss special interests with any student and have sponsored individual projects such as a study of student values, the evaluation of a social service experience and a program of reading and discussion in a specialized branch of the field.

The Psychology Club is an extra-curricular activity with a program responsive to the wishes of members. Lectures by visiting specialists, movies and other resources form the basis for group discussions of general topics, small special-interest group meetings and projects that involve reading, reporting, "learning by doing" and field trips.



athletics

Andover has a comprehensive athletic program. Sports, physical education and outdoor programs are all important to the Andover curriculum and involve every student. The main objective is the development of physical skills and self-confidence, courage and self-control. The program responds to the capabilities and interests of individual students. Most students are involved in intramural and interscholastic sports. Games are scheduled with neighboring schools and with college freshmen. Junior boys have their own athletic program; for all other students the levels of competition are graduated from intramural to junior varsity to varsity programs. To insure balanced competition, a physical co-efficient factor is used in scheduling both interscholastic and intramural contests. A separate girls' gymnasium insures an athletic program particularly suited to the needs of young women. A team of trainers and an Infirmary staff skilled in sports medicine care for boys and girls involved in sports.

Competitive sports are supplemented by a range of non-competitive and non-traditional athletic pursuits. Over a decade ago Andover was instrumental in bringing the Outward Bound program to the United States. Since that time the school has developed a sophisticated outdoor activity curriculum that includes rock climbing, winter mountaineering, cycling, snowshoeing, camping, solo survival, orienteering and ski-touring. Weekend expeditions are complemented by daily skills training, group problem solving and short trips. In the past two years individual faculty members have taken Search and Rescue students on expeditions over vacation to Colorado, Mexico and Nepal.

To make certain that each student has a chance to develop physical skills, a basic evaluation test is administered to all new girls and boys. New Juniors and Lower Middlers have physical training four hours a week for one term of their first year, in addition to regular athletics. This non-competitive program consists of drownproofing (survival swimming), gymnastics and rope training. The standards of performance are based on each student's physical capacity and his or her mental and emotional reaction to controlled stress situations. It is designed to develop a sense of personal achievement and success. The self-confidence and new physical skills gained in the first year assist students as they move into more advanced stages of physical training.

Non-swimmers are given special instruction to insure that they can meet reasonable standards of proficiency. Each spring the department also offers at a nominal fee a Senior Life Saving course and a Water Safety Instructors course for the proficient swimmers who wish official accreditation. The Andover Athletic Advisory Board is a student organization which works with the Athletic Department to make school athletic policy.

There are many school groups organized for particular athletic activities. A Karate Club teaches the elements of that martial art. The Judo Club provides train-



ing in judo, and for those more advanced, instruction in self-defense and in the artistic and philosophical aspects of judo. The Scuba Diving Club organizes ocean trips for experienced divers, and for those who have no experience the club teaches a course in diving. The Rifle Club is a large group of students who wish to shoot for pleasure, for National Rifle Association awards or for the school team, which has a full schedule of interscholastic competition. The Ski Club organizes trips to New Hampshire ski areas, including Cannon, Wildcat, Loon and other mountains. It also sponsors movies on ski racing.

Every year an exotic range of informal student-inspired sports activities comes into being and dominates the long spring evenings. Recent years have featured stickball, boxball, cart races, paddle tennis and kite flying.









Fall Term Athletics

Girls

Field Hockey
Soccer
Tennis
Riding
Cycling
Search & Rescue
Crew
Swimming
Squash
Cross Country

Boys

Football
Tennis
Cycling
Search & Rescue
Crew
Cross Country
Soccer
Golf
Water Polo

Co-ed

Tennis
Cycling
Ballet
Cross Country
Judo
Karate
Modern Dance
Golf

Winter Term Athletics

Girls

Track
Swimming
Basketball
Skiing:
- a. Competitive
- b. Club Cross Country
- c. Recreational

Paddle Tennis
and/or Squash
Ballet
Modern Dance
Fencing
Gymnastics
Search & Rescue
Riflery
Exercise Program

Boys

Track
Swimming
Hockey
Wrestling
Basketball
Skiing:
- a. Competitive
- b. Club Cross Country
- c. Recreational

Paddle Tennis
and/or Squash
Gymnastics (Beginning)
Search & Rescue
Riflery

Spring Term Athletics

Girls

Softball
Track
Lacrosse
Tennis
Crew
Search & Rescue
Canoeing
Cycling
Archery and Squash
Riding
Ballet

Boys

Baseball
Track
Lacrosse
Golf
Crew
Search & Rescue
Canoeing
Cycling
Riding
Tennis

Co-ed

Softball
Track
Tennis
Search & Rescue
Canoeing
Archery
Ballet

“

Students develop a great academic foundation at Andover, but for me the most significant part of the school was that Andover offered the opportunity to learn to live and make friends with people of diverse backgrounds, as well as how to live on your own and depend on yourself.
—Bill Boeschenstein '73

”





health care
tuition

HEALTH CARE

The Isham Infirmary-Hospital of Phillips Academy is accredited by the Joint Commission on Accreditation of Hospitals and is fully licensed as a hospital by the Commonwealth of Massachusetts. The hospital has an x-ray department and clinical laboratory with a full-time technician. Qualified physiotherapists are available either in the Infirmary or Trainer's Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 5:00 p.m. Isham Infirmary-Hospital is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

In addition to the daily outpatient clinic held by the Medical Director, who is a specialist in internal medicine, regular clinics are conducted at Isham Infirmary-Hospital in dermatology, orthopedics, and dentistry. Staff consultants are available in most specialty fields of practice, and full-time clinical psychologists can provide professional counseling.

TUITION 1975-76

The annual tuition fees for 1975-76 are $3,700 for boarding students and $2,900 for day students (who must live in the townships of Andover, North Andover, North Reading, Methuen, or Lawrence). One-half of the tuition fee is payable on September 15, and one-half is payable on January 15. A deposit of $100, required for each student at the time of admission or re-registration, is credited on the first bill.

An alternative to the semi-annual method of payment is a plan by which the tuition may be paid in ten equal monthly installments, starting on August 1 and ending on May 1. A service charge of $10 is made for this plan. Another alternative is the use of the Insured Tui-



tion Payment Plan, arranged with a private agency. Information about these two alternatives, and application forms, are sent to parents before the opening of school.

No rebate will be made against the amount of the tuition installment due on September 15 for any student who for any reason is dismissed or withdrawn between the opening of school in the fall and January 15. No rebate will be made against the tuition installment due on January 15 for any student who is dismissed or withdrawn thereafter.

The tuition charge covers instruction, board, room (including furniture), physical training and athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and the authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures. An additional charge of $15 is required at each tuition payment date for providing and laundering bed linen of the boarding student.



The tuition charge does not include tutoring language training, special instruction in music or athletics, materials' fees for art courses, medical insurance, dental care, special medical expenses, laundry, textbooks, dues to school organizations, or breakage and damage to school property. All protective athletic equipment and uniforms are furnished by the school; however, all students are required to bring their own sneakers and urged to bring along whatever other athletic equipment they already possess. Bills for items not included in the regular tuition charge may be rendered at any time during the school year.

The charges and terms indicated above represent a sincere effort at a realistic projection made at the time this catalog went to press. In these days of dramatic cost increases, changes may have to be made. If this becomes necessary, notification will be given prior to admission or re-registration.

Other Expenses

As a rough guide to parents in budgeting for the total expected expenses of each academic year, the following low-average approximations of extras are given.

Athletic equipment	$ 75.00
Laundry and cleaning	50.00 to 200.00
Medical insurance (optional)	35.00
Books and supplies	150.00
Dues, publications and charitable contributions	20.00

Breakage deposit (refundable)	0 to 25.00
Miscellaneous, including spending money	120.00
Total	$450.00 to 675.00

Parents or students may open an account at the Treasurer's office for personal expenses during the school year.





“

Andover should vigorously recruit an international student body, boys and girls, of social, racial, national, and religious diversity.
—T.R. Sizer

”



The school's constitution, written in 1778, states that Andover "shall be ever equally open to youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over two thousand candidates the three hundred and fifty most promising and deserving young people. The school's endowment covers approximately fifty percent of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section).

APPLICATION PROCEDURE

The closing date for receiving applications is February 1, 1975 (except for Postgraduates). Strong priority is given to those candidates who complete the full admissions procedure by January 15, 1975.

The four steps for Application

1. Submit the Preliminary Application Card and the non-refundable $10 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.)
2. Complete the Personal Interview requirement. An interview is required of all applicants. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Candidates who cannot visit the school, however, should arrange to have an interview with an Alumni Representative in their geographical area. (See page 46.)
3. Return the Final Application Form. All Final Application Forms are mailed in mid-November to candidates who have submitted a Preliminary Application card for the following fall. Forms should be returned within three weeks of receipt. (Late applicants should return forms immediately.)
4. Take the Secondary School Admissions Test. (12th grade or Postgraduate candidates should refer to the information below on Senior Class Candidates.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, N.J. 08540, will be sent by Andover to all 1974-75 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test. The Secondary School Admissions Test will be given on the following dates:

December 14, 1974
January 18, 1975*
March 8, 1975
April 12, 1975
May 17, 1975*

*International administration

Candidates are strongly urged to take the December, 1974 administration of the SSAT. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1975 administration. Taking the SSAT at a later date may well jeopardize a candidate's admission as enrollment may be completed.



Senior Class Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests. (C.E.E.B., Box 592, Princeton, New Jersey 08540.) After the test date candidates must ask the College Board, in writing, to send all test results to Phillips Academy. A check or money order for $2 made out to C.E.E.B. must accompany that request. A number of well-qualified Postgraduates admitted each year are treated as full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

Acceptance Dates

Candidates for 1975 may expect notification of action as soon as possible after March 10. On April 10 parents will be required to confirm admissions by a $100 deposit. (It is possible that 12th grade and Postgraduate candidates will not be notified until later in the spring.) Final admission will depend upon a satisfactory year-end report from the previous school.

Early Decision

Andover will not participate in any early decision plan for admissions in September, 1975.

Whom to Contact at Andover

If you have questions about Andover's admissions or application procedures, please contact the Admissions Office.

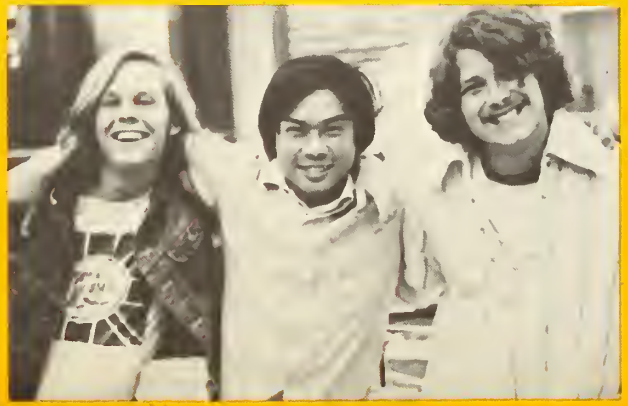
Director of Admissions: Joshua L. Miner
Address: Admissions Office
Phillips Academy
Andover, Massachusetts 01810

Office hours: Monday through Friday, 9:00 a.m. to 5:00 p.m.
Saturday, 9:00 a.m. to 12:00 noon
Telephone: 617 475-3400

FINANCIAL AID

Over three hundred families receive financial aid in the form of a scholarship grant, a long-term low interest loan or a combination of both. In 1975, $680,000 will be available for financial assistance. Approximately $200,000 is reserved for new students. The dollar amount of the assistance varies from $250 to full tuition. Each family indicating a need for assistance on the Preliminary and Final Applications will be mailed a Parent's Financial Statement which is processed by the School Scholarship Service in Princeton, N.J.

All awards are reviewed annually and a Parent's Financial Statement must be filed each year if continued aid is needed. Students receiving assistance are expected to maintain academic records compatible with their ability.





ALUMNI REPRESENTATIVES

Candidates who are unable to visit Andover should arrange an interview with one of the Alumni Admissions Committee members listed below. It is suggested that a telephone call be made or a letter sent in advance to establish a mutually convenient time. A candidate who finds it difficult to visit one of the interviewers listed below should communicate with the Admissions Office in Andover. An effort will be made to locate an additional representative from that area among the graduates of either Phillips or Abbot Academy.

Admissions Interview Schedule

During the coming school year the Director of Admissions and representatives from the Administration plan to be in the following cities:

Chicago	November 11-13
Atlanta	November 13-15
San Francisco	December 2-4
Los Angeles	December 5-7

Candidates wishing to complete the interview requirement in one of these four areas should contact the local Alumni Representative whose name shows an asterisk on the following list. Or they may arrange an appointment by writing or telephoning the Phillips Academy Admissions Office in advance of the visit.

ALABAMA

Bessemer

Ms. Jacqueline Carter '72
5008 Tucker St. 35020

Birmingham

Robert B. Donworth, Jr. '42
1500 Brown Marx Building
2000 1st Avenue North 35200

ALASKA

Anchorage

John K. Brubaker '55
2110 Otter Street 99500

Juneau

Cadmus Z. Gordon, Jr. '16
Box 1153 99801

ARIZONA

Litchfield Park

George T. French '29
P.O. Box 578
1024 Sierra Hermosa 85340

Tucson

James R. Adriance '28
2250 East 8th Street 85700

Keith S. Brown '31
3200 North Swan Road 85700

John S. Greenway '42
1634 North Olsen 85700

ARKANSAS

Little Rock

Mose Smith III, M.D. '48
5324 West Markham Street 72200



CALIFORNIA

Berkeley
Samuel Dysart, Jr. '46
Dymo Industries, Inc.
P.O. Box 1030 94700

Beverly Hills
Thompson K. Vodrey '52
1529 Gilchrest Drive 90213

Davis
Donald M. Reynolds '38
University of California
Dept. of Bacteriology 95616

LaCanada
Peter B. Eakland '63
5251 No. Haskell Road 91011

La Jolla
William S. Creighton '39
2600 Torrey Pines Road 92037

Lomita
John E. Kidde '64
1817 Leola St. 90717

Los Angeles
*David A. Cathcart '57
Gibson, Dunn & Crutcher
515 South Flower St. 90052
213 488-7000
George Davis, M.D. '53
4616 Keniston Ave. 90052
Walter L. Farley, Jr. '28
12300 1st Helena Drive 90052
Raymond F. Norton '47
3416 Manning Avenue #1807
90052

Manhattan Beach
Mrs. James P. Regan '57
1717 Highland Ave. 90266

Marysville
Harold S. Edwards '28
770 Ramirez Road 95901

Palo Alto
Henry E. Riggs '53
634 Lowell Avenue 94302
Donald A. Way '63
P.O. Box 338 94302

Pasadena
Russell M. Decker '56
1445 Linda Ridge Road 91109

Ross
H. Leonard Richardson '45
The Katherine Branson School
94957

San Diego
Norman R. Allenby '51
Hillyer & Irwin
530 B Street—Suite 1400 92101

San Francisco
Ms. Dorothy M. Easton '61
KPOO
P.O. Box 11008
*Alan L. Fox '60
1810 Green St. 94123
415 567-6754
William W. Sterling '57
Heller, Ehrman, White
& McAuliffe
44 Montgomery Street 94101

San Rafael
Ivan B. Higgins, Jr., M.D. '62
121 Altena Street 94901

Santa Barbara
Mancel T. Clark, Jr. '28
605 San Ysidro Road 93101

COLORADO

Aspen
Stephen W. Harris '38
P.O. Box 1653 81611
John P. McBride '56
P.O. Box 1940 81611

Boulder
Mrs. Constantinos Emmanuel '54
2825 Kenyon Circle 80302

Denver
Peter Grant '49
545 Race Street 80202
William D. Lynch '38
P.O. Box 599 80202
David C. Wilhelm '38
Wilhelm Foods, Inc.
P.O. Box 16086
5590 High Street 80202

Englewood
John F. Malo '40
4975 So. University Blvd. 80110

Grand Lake
James E. Liles '55
P.O. Box 442 80447

CONNECTICUT

Greenwich
Gerard E. Jones '55
Kenilworth Terrace 06830
Mrs. Claude A. Wilson, Jr. '53
65 Patterson Avenue 06830

Watertown
Mrs. Roger Maynard, Jr. '62
Taft School 06795

DELAWARE

Wilmington
Mrs. Robert Bryant '65
2309 Saymour Road 19899
Mrs. Reeves W. Hart, Jr. '47
18 Briar Road
Briarwood 19899

DISTRICT OF COLUMBIA

Washington
George W. Beatty '50
Lee, Toomey & Kent
1200 Eighteenth Street N.W.
20000
Lawrence C. Dalley, Jr. '45
Securities Dealers Ins. Corp.
888 17th Street, N.W. 20000
Robert A. Martin '50
2450 Virginia Avenue N.W. 20000
Peregrine White '29
National Academy of Sciences
2101 Constitution Avenue, N.W.
20000

FLORIDA

Jacksonville
Laurence F. Lee, Jr. '40
Peninsular Life Insurance Co.
P.O. Box 2667 32201
Arthur W. Milam '45
Milam, Martin & Ade
P.O. Box 58 32201
Robert B. Van Cleve, M.D. '50
Riverside Clinic
2005 Riverside Avenue 32201

Miami
David J. Williams, II '38
13815 S.W. 84th St. 33101

Naples
Robert W. Hattemer '49
410 9th Avenue S. 33940

North Miami
James E. Hinish '56
2225 Broad Causeway 33161

Sarasota

Parker C. Banzhal '38
3435 Sea Grape Drive 33578

Winter Haven

Richard C. Cheney '48
Barnett Bank of Winter Haven
115th St. S.W. 33880

Andrew P. Ireland '48
Barnett Bank of Winter Haven, N.A.
P.O. Box 820 33880

GEORGIA

Atlanta

Herbert R. Elsas '28
3100 First National Bank Tower
30304

*Peter C. Mohr '54
1035 Angelo Court, N.E. 30319
hme. 404 261-5471
off. 404 658-1100

Savannah

William C. Rhangos, M.D. '49
Savannah Orthopedic Clinic, P.A.
210 Hall St. East 31401

Stone Mountain

Ernest Matton '55
4389 Bramwell Drive 31401

IDAHO

Boise

Richard W. Hirst '28
c/o Intermountain Gas Co.
555 South Cole Road
P.O. Box 7608 83707

ILLINOIS

Kenilworth

Mrs. Robert L. Kallman '52
535 Brier Street 60043

Northfield

*W. Newton Burdick, Jr. '35
hme. 217 Dickens Road 60093
312 446-5660
off. 1500 Skokie Blvd
312 272-1100
Northbrook, Ill. 60062

Peoria

John F. Dolan '58
1125 First National Bank Bldg.
61601

Peoria Heights

Robert T. Stevenson, Jr. '53
4849 Grand View Drive 61614

INDIANA

Evansville

Reginald B. Collier '45
7300 Newburg Road 47708

Indianapolis

C Perry Griffith '45
499 Forest Boulevard 46206

KANSAS

Junction City

John G. Montgomery '58
The Junction City Daily Union
814 North Washington St. 66441

Shawnee Mission

Howard T. DuBois '43
5715 Windsor Drive 66202

KENTUCKY

Anchorage

Samuel S. Caldwell, Jr. '29
1604 Lincoln Lane 40223

Louisville

H. Hewett Brown '55
Mutual Benefit Life Insurance Co.
100 E. Liberty St., Suite 300
40201



Prospect

Alexander C. Browne '60
7839 Wolf Den Branch Road
40059

LOUISIANA

New Orleans

Marshall L. Posey, Jr. '55
5501 Cherlyn Drive 70113

Shreveport

Donald A. Raymond, Jr. '32
1132 Erie St. 71106

MARYLAND

Annapolis

H. Richard Duden '43
New York Life Insurance Co.
49 Maryland Avenue 21401

Ruxton

Gardner W. Smith, M.D. '49
1503 Old Orchard Lane 21204

MICHIGAN

Birmingham

Frederick G. Bahr '47
4050 W. Maple Rd. 48012

Mrs. William Reepmeyer '61
440 Chesterfield 48012

Detroit

James N. Candler, Jr. '60
800 First National Bldg. 48233

Grosse Pt. Shores

William D. Dahling '46
60 Hawthorne Road 48236



Leland
George A. Ball '49
P.O. Box 235 49654

MINNESOTA

Duluth
Oliver M. Houx '57
3318 Kolstad Avenue 55801

Long Lake
Thomas M. Crosby, Jr. '56
1612 Willow Drive 55356

Rochester
Dr. Douglas B. McGill '47
303 S.W. 6th Ave. 55901

Wayzata
J. Kimball Whitney '46
559 Harrington Road 55391



MISSISSIPPI

Lumberton
Michael R. Eubanks '58
P.O. Box 527 39455

MISSOURI

Columbia
George C. Miller '35
600 South Greenwood 65201

David B. Rogers '59
2406 Ridgefield Road 65201

Jefferson
Benner C. Turner '23
411 Hickory 65677

Joplin
Lawrence S. Crispell, M.D. '38
6th and Pearl Avenue 64801

Kansas City
James J. Fisher '56
Kansas City Star
c/o City Desk
18th and Grand 64108

St. Joseph
Robert A. Brown, Jr. '49
Brown, Douglas & Brown
510A Francis Street 64501

F. Gregg Thompson, Jr., M.D. '47
902 Edmond Street 64501

St. Louis
Jeremy T. Johnstone '48
36 Rio Vista Drive 63155

John Shepley '42
503 Locust Street 63155

Eugene F. Williams '42
701 Barnes Road 63155

NEBRASKA

Omaha
Philip S. Kemp '43
740 North Happy Hollow 68108





NEVADA

Deeth

William B. Wright, Jr. '50
Mary's River Ranch 89823

Las Vegas

Dr. William B.A. Bentley '42
3104 Sonia Drive 89114

Reno

Robert S. Kimball, III '51
P.O. Box 3117 89501

NEW HAMPSHIRE

Dover

Rev. L. Arthur Domingue '58
80 Silver Street 03820

NEW JERSEY

Ridgewood

Kenneth E. MacWilliams '54
323 Hamilton Road 07451

Summit

Carey Orr Cook '61
20 Greenbriar Drive 07901

NEW MEXICO

Albuquerque

John P. Eastham '45
Rodey, Dickason, Sloan, Akin & Robb
First National Bank Bldg–West
87103

Gregory H. Illanes, Jr. '38
Quinn & Company
200 2nd Street, N.W. 87103

George F. Peters '62
906 11th Street, N.W. 87103

Santa Cruz

Thomas W. Mayer '61
P.O. Box 171

NEW YORK

Amsterdam

Leon H. Young '20
22 Summit Avenue 12010

Bedford

John H. Odden '63
c/o The Bedford-Cisqua School
P.O. Box 488 10506

Buffalo

Walter F. Stafford, Jr., M.D. '39
24 Tudor Place 14240

John N. Walsh, Jr. '39
25 St. Catherine's Court 14240

Geneseo

John P Linfoot '58
62 Main Street 14454

John H. Porter '58
4 Oak Street 14454

Larchmont

Oliver Barres '39
2 Bayard Street 10538

New York City

Peter M. Capra '53
118 East 93rd Street 10028

William D. Hart, Jr. '36
Whitman, Ransom & Coulson
522 Fifth Avenue 10036

Sven E. Hsia '59
35 East 85th Street 10028

John D. Lynch '46
J. & W. Seligman & Co.
65 Broadway 10025

Peter G. Pappas '63
Apt. 3D
201 E. 83rd St. 10028

Orchard Park

Gilbert R. Bamford '58
29 Tanglewood Drive West 14127

Oyster Bay

James C. Miller, II '50
MTR—211 Sunset Road 11771

Arthur M. Rogers Jr. '59
Cove Neck Road 11771

Pelham

Nathaniel M. Cartmell Jr. '42
416 Fowler Ave. 10803

Rochester

Bruce B. Bates '49
87 Grosvenor Road 14603

Barry C. Phelps '49
B.C. Phelps & Co.
160 Allen's Creek Road 14603

Syracuse

David D. Jones '37
50 Presidential Plaza 13210

David H. Northrup '32
106 Wendell Terrace 13210



NORTH CAROLINA

Chapel Hill

Douglas W. Torrington '63
38 Stateside Drive 27514

Charlotte

E. Osborne Ayscue '51
Helms, Mullis & Johnston
800 N.C. National Bank Bldg.
28202

NORTH DAKOTA

Fargo

Thomas L. Powers '20
1617 Seventh Street, South
58102

OHIO

Chagrin Falls

Edward T. Bartlett, III '56
185 West Carriage Drive, #204
44022

Cincinnati

Rt. Rev. Henry W. Hobson '10
405 Albion Avenue, Glendale
45246

Wilford L. Romney '19
2401 Ingleside Avenue, Apt. 11E
45202

Cleveland Heights

Edward D. Yost '47
3137 Fairfax Road 44118

Columbus

Gaylord E. Smith '57
1893 Coventry Road 43216

Granville

George W. Chessman '37
210 Briarwood Road 43023

Kettering

Vernon E. Midgley '42
Carriage Realtors
509 E. Stroop Road 45429

OKLAHOMA

Bartlesville

Carl M. Elkan '35
3501 Woodlawn Road 74003

Tulsa

Henry C. Williams '38
5159 East 31st Street 74101

OREGON

Eugene

George H. Hughes '59
Willamette Professional Center
2460 Willamette 97401

Portland

Broughton H. Bishop '45
Pendleton Woolen Mills
218 S.W. Jefferson Street 97208

Frederick J. Kingery, M.D. '45
2250 N.W. Flanders Street 97208

Mrs. David Park '41
12000 S.W. Boones Ferry Road
92708

PENNSYLVANIA

Allentown

Charles D. Snelling '49
2949 Greenleaf Street 18101

Bridgeville

John M. Phillips, Jr. '30
Equipco Sales
Phillips Industrial Park
Mayview Road 15017

Chambersburg

John M. Sharpe, Jr. '46
630 Philadelphia Avenue 17201

Erie

Edward M. Mead '45
Times Publishing Company
205 West 12th Street 16501

Malvern

John T. Lansing '62
20 Andrews Avenue 19355

Narberth

Mrs. John H. Lewis, Jr. '57
422 Penn Valley Road
Penn Valley 19072

Philadelphia

Amory M. Sommaripa, M.D. '48
529 Cresheim Valley Road 19104

Pittsburgh

Edward O'Neil '27
P.O. Box 1692 15222

Evans Rose, Jr. '50
Rose, Schmidt & Dixon
Ninth Floor Oliver Bldg. 15222

Scranton

W. Lawson Chamberlain '34
Chamberlain & Clarke
Northeastern National Bank Bldg.
18503

Wallingford

David E. Winebrenner '58
417 Golf View Road 19086

Waverly

Thomas Rodes '54
Main Street 18471

Jonathan Vipond, III '63
P.O. Box 24 18471

Wayne

Robert Schafer '29
730 Mancill Road 19087

RHODE ISLAND

Providence

Mrs. Warren S. Daniel '66
39 George St. 02904

SOUTH CAROLINA

Charleston

Mrs. W. Richard Jackson, Jr. '53
19 Water St. 29401

SOUTH DAKOTA

Pine Ridge

Rev. George P. Pierce '49
P.O. Box 300
57770

Sioux Falls

Hiram G. Ross '21
P.O. Box 423
57101

TENNESSEE

Knoxville

John Muldowny '49
Department of History
University of Tenn.
1101 McClung Tower 37902

Memphis

Peter R. Formanek '62
1478 Peabody Avenue
38101



Henry Loeb, III '39
365 Colonial Road 38101

TEXAS

Amarillo

Edward L. Roberts '06
2211 Harrison Street 79107

Austin

Austen H. Furse, Jr. '40
6105 Highland Hills Drive 78710

Conroe

Marshall T. Gleason '33
113 Rolling Hills Drive 78710

Dallas

Charles D. Burnside '58
7605 Rambler Road
Windfall 102 75221

N. Bruce Calder '41
1200 Hartford Building 75221

John R. Sears '36
Republic National Bank of Dallas
75221

El Paso

John D. Mason, Jr. '42
1223 Rim Road 79910

Fort Worth

Edwin Ryan '49
711 Baker Building 76101

Galveston

Stewart G. Wolf, Jr. M.D. '31
The Marine Biomedical Institute
200 University Avenue 77550

Houston

Thomas J. Keefe '50
803 Soboda Court 77002

Mrs. Robert A. Maclean '53
259 Tamberlaine 77002

UTAH

Salt Lake City

Lincoln D. Clark, M.D. '42
5492 Merlyn Drive 84101

C. Chauncey Hall, M.D. '41
2652 East 6200 South 84101

VERMONT

Burlington

William Cruikshank, Jr. '59
94 N. Winooski Ave., Apt 7 05401

Hyde Park

Cadwallader E. Brooks '59
R.D. 05655

Middlebury

C. Andrew Kaiser '45
Box 707 05753

VIRGINIA

Newport News

Conway A. Downing, Jr. '64
220 Prince Drew Road 23607

WASHINGTON

Bainbridge Island

Holt W. Webster '39
Rte. 8, Box 8800
98110

Bellevue

Walter S. Kimball, M.D. '30
3407 76th Avenue, N.E.
Evergreen Point
98004









Seattle

Lucius H. Biglow, Jr. '42
1900 Washington Building
1325 4th Avenue 98101

Dr. William H. Hatheway '41
College of Forest Resources
University of Washington 98105

Tacoma

Howard S. Reed '45
7502 North Street S.W. 98402

WEST VIRGINIA

Charleston

William A. Pugh '39
15 Grosscup Road 25301

WISCONSIN

Madison

Dr. William F. Dove '54
4142 Mandan Crescent 53711

Dr. John T. Mendenhall '31
140 No. Prospect Ave. 53711

Milwaukee

Robert A. Uihlein, Jr. '34
235 West Galena Street 53401

Racine

John H. Batten, II '31
Twin Disc. Clutch Co.
1328 Racine Street 53401

WYOMING

Casper

J.A. Padon, Jr. '39
P.O. Box 1516 82601

Story

Maurice Leon, Jr. '42
P.O. Box 368 82840

Wilson

Meridan H. Bennett '45
P.O. Box 33 83014

BERMUDA

Hamilton

Hugh C. Masters '40
P.O. Box 821

CANADA

Calgary, Alberta

Thomas B. Hewett '39
1600 Royal Bank Building
335 8th Avenue S.W.

CHINA

Hong Kong

W.S. Cheng '60
China-Pacific Intermodal, Ltd.
Wang Kee Bldg., 2nd Floor
34-37 Connaught Rd. C.

ENGLAND

Bucks

Laureance W.M. Viney '38
Hazell, Watson & Viney Ltd.
The Printing Works
Tring Road
Aylesbury

London

William Adams, III '44
26 Hans Court
Hans Road



Arthur L. Kelly '55
71 Chester Square

FRANCE

LeVesinet

Roger Seymour '44
66 Bis, Rte de Croissy

St. Cloud

Patrick G. Nollet '51
28 Rue des Sablones
78 La Celle

ITALY

Rome

Thomas K. Burgess '62
St. Stephen's School
Via P.P. Rubens, 21

PHILLIPINES

Manila

Peter C. Parsons '55
Far East Molasses Corp.
7th Floor, 1515 Roxas Bldg.
P.O. Box 886

PUERTO RICO

Bayamon

Ricardo A. Gonzalez '53
A13 Argentina St.
Gardenville

Carolina

Guillermo E. Gonzalez, Jr. '50
Leaseway Transportation Corp.
P.O. Box G, Ceramic Annex

Guaynabo

Jorge R. Gonzalez '62
Calle Los Frailes C-4
Urbanizacion Los Frailes

San Juan

Glendon M. Campbell, Jr. '48
Procter & Gamble
G.P.O. Box 3187

SAUDI ARABIA

Dhahran

Donald K. Cameron, Jr. '48
Arabian American Oil Company
P.O. Box 1948

SPAIN

Madrid

Christopher D. Costanzo '59
Second Secretary of Embassy
Embassy of the U.S.A.

Carlos M. de la Cruz '59
ANA Teresa, 17
Aravacas

THAILAND

Bangkok

Piya Chakkaphak '48
17/226 Pattanavej 5
Sukhumvit Road 71

VENEZUELA

Caracas

Armando Bacalao '65
Residencias Naiguata, Apt. 9B
La Florida

Dr. Alberto J. Vollmer '42
Edf. Polar-Piso 13
Plaza Venezuela

Valencia

John R. Thompson '41
c/o C.A. Firestone Venozolana
Apartado 194

VIRGIN ISLANDS

St Thomas

Robert E. Noble '43
P.O. Box 5170

WEST GERMANY

Bochum (463)

Edwin Hopkins '56
Gutenbergstrasse 10





Donald Holman McLean, Jr. '28 LL.B.
elected 1958
elected President 1968
Andover, Massachusetts

Theodore Ryland Sizer
Ph.D., Ped.D., Litt.D.
Clerk
elected 1972
Andover, Massachusetts

Charles Stafford Gage '21, A.M.
Treasurer
elected 1952
elected Treasurer 1966
New Haven, Connecticut

John Usher Monro '30, A.B.
elected 1958
Birmingham, Alabama

Robert Livingston Ireland, III '38, LL.B.
elected 1960
New York, New York

George Herbert Walker Bush '42, A.B.
elected 1967
Washington, D.C.

John Lewis Cooper '31, A.B.
elected 1968
Needham, Massachusetts

Philip Kirkham Allen '29, A.B.
elected 1969
Andover, Massachusetts

Charles Appleton Meyer '35, A.B.
elected 1969
Lake Forest, Illinois

Gerard Piel '33
A.B., D.Sc., Litt.D., L.H.D., LL.D.
elected 1969
New York, New York

William Wade Boeschenstein '44, S.B.
elected 1971
Perrysburg, Ohio

Carol Hardin Kimball, Abbot '53, A.B.
elected 1974
New York, New York

Alumni Trustees

Carl Bearse Jacobs '37, A.B.
elected 1972 for three years
Glenview, Illinois

Henry Martin Hubshman, Jr. '42, A.B.
elected 1973 for three years
New York, New York

Hilary Paterson Cleveland, Abbot '45, A.M.
elected 1974 for three years
New London, New Hampshire

Roger Franklin Murray, II '28, Ph.D.
Ex Officio for one year as retiring President of the Alumni Association
New York, New York

Hubert Clare Fortmiller, Jr. '52, A.M.
Ex Officio for one year as President of the Alumni Association
Concord, Massachusetts

Gerrit Medbury Keator '57, M.A.T.
Ex Officio for one year as Chairman of the Alumni Fund
Philadelphia, Pennsylvania

Abbot Trustees

The following former Abbot Academy Trustees will serve with the Phillips Academy Board through June, 1978:

Melville Chapin, P.A. '36, J.D.
elected 1968
Cambridge, Massachusetts

Beverly Brooks Floe, Abbot '41, A.B.
elected 1970
Belmont, Massachusetts

Mary Howard Nutting, Abbot '40, A.B.
elected 1969
Gloucester, Massachusetts

Trustees Emeriti

Sumner Smith '08, A.B.
1956-1960
Lincoln, Massachusetts

Henry Wise Hobson '10
D.D., LL.D.
1937-1966 (President 1947-1966)
Cincinnati, Ohio

James Phinney Baxter, III '10
Ph.D., Litt.D., L.H.D., D.Sc., LL.D.
1942-1966
Williamstown, Massachusetts

Frederick Goodrich Crane '15, A.B.
1963-1968
Lake Forest, Illinois

Stephen Young Hord '17, A.B.
1963-1968
Lake Forest, Illinois

John Peters Stevens, Jr. '15, A.B.
1948-1969 (President 1966-1968)
Edison, New Jersey

trustees







administration faculty

Headmaster's Office

Theodore Ryland Sizer
Ph.D., Ped.D., Litt.D.
Headmaster

Peter Quackenbush McKee,
Ed.M.
Associate Headmaster

Amy Ramsay Robinson
Administrative Assistant
to the Headmaster

Jane Harrison Munroe
Administrative Assistant
to the Associate Headmaster

Jerry Foster, A.M.
Director, Complementary
Schools Project

Office of the Dean of the Academy

Carolyn Elizabeth Goodwin, A.M.
Dean of the Academy

William Franklin Graham, S.B.
Associate Dean

Carolyn Lumsden Johnston, A.B.
Associate Dean

James Frederick Lynch, A.B.
Registrar

John Clairborne McClement, Ed.M.
Scheduling Officer

Joan F. Schlott
Recorder

Deans of the Residential Clusters

Carroll Wesley Bailey, J.D.
Abbot Cluster

David Owen Cobb, A.B.
Flagstaff Cluster

Frank McCord Eccles, A.M.
West Quadrangle South Cluster

Clement Morell, A.M.
Pine Knoll Cluster

John Richards, II M.A.T.
Rabbit Pond Cluster and
Chairman of the Cluster Deans

Nathaniel Baldwin Smith, A.M.
West Quadrangle North Cluster

Office of Admissions and Financial Aid

Joshua Lewis Miner, A.B.
Director of Admissions

Richard Charles Griggs, A.B.
Associate Director of Admissions
Director of Financial Aid

Dalton Hunter McBee, A.B.
Admissions Officer

FACULTY

The date following the degree indicates the year the instructor joined the Andover faculty.

James Ruthven Adriance*
A.B. (1934)
Assistant to the Headmaster

Frederick Scouller Allis, Jr.
A.M., L.H.D. (1936)
Instructor in History and the
Social Sciences on the Martha
Cochran Foundation
Chairman of the Department of
History and the Social Sciences

Samuel Irvine Allison Anderson
A.M. (1968)
Instructor in French

Patricia Prentice Anderson
S.B. (1973)
Instructor in Physical Education

Charles Emory Apgar, III
M.A.T. (1969)
Instructor in Physics

Carroll Wesley Bailey
J.D. (1970)
Instructor in English
Dean of Abbot Cluster

Peter Joseph Baleyko
S.B. (1970)
Assistant to the Comptroller

Leslie Ballard
M.A.T. (1973)
Instructor in Chemistry

Marie Madeleine Baratte
A.M. (1973)
Instructor in French
(Abbot Academy, 1946)

Glenn Frank Bastian
A.B. (1972)
Instructor in Biology and English

Keder Bayard
L.L.D., A.M. (1973)
Instructor in Mathematics
(Abbot Academy, 1972)

Yolande Bayard
A.M. (1973)
Instructor in French

Crayton Ward Bedford
A.M. (1962)
Director, School Year Abroad

Francis Emanuel Bellizia, Jr.
A.M. (1970)
Instructor in English

Priscilla Bellizia
(1974)
House Counselor
Elbridge Stuart West

Audrey Nye Bensley
(1973)
Instructor in Art
(Abbot Academy, 1965)

*on leave of absence

FACULTY (continued)

Gordon Gilmore Bensley
A.B. (1949)
Instructor in Art on the Ammi Wright Lancashire Foundation

George William Best
A.M. (1958)
Instructor in Mathematics

Helen Schneider Best
(1974)
House Counselor
Abbot Stevens East

Carolyn B. Brecher
A.B. (1974)
Instructor in Modern Dance

Ralf Bremermann
A.M. (1973)
Instructor in German

John Frank Bronk
(1958)
Instructor in Physical Education and Physiotherapist

William Hayes Brown
A.M. (1938)
Instructor in English on the Independence Foundation Teaching Endowment

William John Buehner
A.M. (1958)
Instructor in Latin on John Charles Phillips Foundation

Anne Harriss Bugbee
M.A.T. (1973)
Instructor in English
(Abbot Academy, 1959)

James Leighton Bunnell
A.M. (1967)
Instructor in History and the Social Sciences

John Kelvington Burnap
A.B. (1972)
Instructor in Biology



John Patten Chivers
A.M. (1960)
Instructor in German
Chairman of the German Department
Chairman of the Division of Languages

Susan Clark
A.M. (1973)
Instructor in Classics
(Abbot Academy, 1969)

Susan Clarke
A.M. (1973)
Curator of American Art at the Addison Gallery

William Biggs Clift, Jr.
Mus. Ed.B. (1956)
Instructor in Music
Chairman of the Music Department

David Owen Cobb
A.B. (1968)
Instructor in English
Dean of Flagstaff Cluster

Thomas Edward Cone, III
A.M. (1966)
Instructor in Biology
Chairman of the Biology Department

Christopher Capen Cook
M.F.A. (1964)
Instructor in Art
Director of the Addison Gallery of American Art

James Harold Couch
A.M. (1953)
Instructor in Spanish
Chairman of the Spanish Department

Alfred James Coulthard
S.B. (1962)
Instructor in Physical Education

Douglas Everett Crabtree
Ph.D. (1971)
Instructor in Mathematics

Robert Lee Crawford
A.M. (1971)
Instructor in History and the Social Sciences
Co-Director of College Counseling

Linda Cregg
A.M. (1973)
Instructor in French

Paul Barry Crook
A.A. (1969)
Instructor in Physical Education and Psychology
Director of Activities Program

Frank Frederick DiClemente
S.B. (1935)
Instructor in Physical Education

George MacNamara Dix
A.M. (1972)
Instructor in Modern Languages

Joseph Rittenhouse Weir Dodge
A.M. (1944)
Instructor in English

Sherman Frederick Drake
Ed.M. (1953)
Instructor in Mathematics

Robert Dickerson Drennan
A.M. (1974)
Instructor in Anthropology and Associate Director of Robert S. Peabody Foundation

Frank McCord Eccles
A.M. (1956)
Instructor in Mathematics
Dean of West Quad South Cluster

George Howard Edmonds
Ed.M. (1961)
Instructor in English
College Counselor

Patricia Hope Edmonds
A.M.T. (1974)
House Counselor Johnson Hall South

Marion Finbury
A.B. (1973)
Co-Director of College Counseling
(Abbot Academy, 1969)

Sally Elaine Fischbeck
A.B. (1973)
Instructor in Mathematics

Owen J. Flanagan Jr.
Ph.D. (1974)
Instructor in Philosophy

Harper Follansbee*
Ed.M. (1940)
Instructor in Biology on the Samuel Harvey Taylor Foundation

Dianne Moon Foster
A.B. (1974)
House Counselor
Elbridge Stuart East

Jerry Foster
A.M. (1969)
Instructor in English
Director of the Complementary Schools Project

Wayne Andrew Frederick
Ph.M. (1962)
Instructor in History and the Social Sciences on the Emilie Belden Cochran Foundation

John Scanlon Gail
Ed.M. (1973)
Instructor in Social Studies

Ronald Gerard Giguere*
M.A. (1973)
Instructor in French
(Abbot Academy, 1969)



Carolyn Elizabeth Goodwin
A.M. (1973)
Instructor in Mathematics
Dean of the Academy
(Abbot Academy, 1947)

Donald Haverstick Goodyear, Jr.
Ph.D. (1968)
Instructor in English

William Franklin Graham
S.B. (1952)
Instructor in Mathematics
Associate Dean

Richard Charles Griggs
A.B. (1973)
Associate Director of Admissions
Director of Financial Aid
(Abbot Academy, 1969)

*on leave of absence

FACULTY (continued)

Christopher Jude Gurry
A.B. (1974)
Instructor in Physical Education
Instructor in History and the Social Sciences

Norwood Penrose Hallowell, Jr.
A.B. (1934)
Instructor in English and Public Speaking on the Alfred Lawrence Ripley Foundation

Judith Adams Hamilton
A.B. (1974)
House Counselor
Double Brick House

Thomas Robert Hamilton
M.A.T. (1969)
Instructor in Biology

Edmond Emerson Hammond, Jr.
Sc.M. (1953)
Instructor in Mathematics
Chairman of the Mathematics Department

Frank Lee Hannah
A.M. (1968)
Instructor in Mathematics

Douglas Ray Hardin
Ph.D. (1973)
Instructor in Physical Sciences

Fred Harold Harrison
A.M. (1952)
Instructor in History and the Social Sciences
Chairman of the Athletic Department and Director of Athletics

Marjorie Alexander Harrison
A.B. (1973)
Instructor in Physical Education
(Abbot Academy, 1968)

James Calvin Harwood
M.M. (1973)
Instructor in Music

Barbara Hawkes
M.S. (1973)
Instructor in Biology
(Abbot Academy, 1972)

Maury Paul Hepner
Ph.D. (1973)
Instructor in Mathematics

Henry Lynn Herbst
A.M. (1972)
Instructor in French

Sally Herbst
(1974)
House Counselor
Abbot Stevens West

Aloysius John Hobausz
S.B. (1968)
Director of the Audio-Visual Center

Louis John Hoitsma, Jr.
Ed.M. (1953)
Instructor in Mathematics

Robert Penniman Hulburd
A.M. (1953)
Director of Alumni Affairs

Carol Ann Irish
Ph.D. (1973)
Instructor in English

Carolyn Lumsden Johnston
A.B. (1973)
Associate Dean
(Abbot Academy, 1965)

Christine Ronay Johnston
A.M. (1973)
Instructor in Music
(Abbot Academy, 1970)

Dorothy Judd
A.M. (1973)
Instructor in Spanish
(Abbot Academy, 1948)

Paul Kalkstein
M.A.T. (1970)
Instructor in English

Nicholas Van Houten Kip
A.M. (1968)
Instructor in Classics

Christopher Dunbar Kirkland*
A.B. (1968)
Instructor in English





Catherine Jeanne Kirkland*
Licence es Lettres, Maîtrise (1970)
Instructor in French
(Abbot Academy, 1968)

Marc Dana Koolen
S.B. (1974)
Instructor in Biology

Georges Nicolas Krivobok
A.M. (1973)
Instructor in French and Russian
(Abbot Academy, 1969)

Mari-Lou Krivobok
(1974)
House Counselor Bancroft Hall

Carl Edward Krumpe, Jr.
A.M. (1960)
Instructor in Classics
Chairman of the Classics Department

Robert Edwin Lane
A.M. (1955)
Instructor in Latin and Russian on the Alfred Ernest Stearns Foundation

Hart Day Leavitt
A.B. (1937)
Instructor in English

Susan M. Lebach
A.M. (1974)
Instructor in English and Foreign Languages

Robert Andrew Lloyd
Arch.M. (1962)
Instructor in Art
Chairman of the Art Department

Susan McIntosh Lloyd
M.A.T. (1973)
Instructor in History and the Social Sciences
(Abbot Academy, 1968)

John Richard Lux
M.S.Ed. (1949)
Instructor in Mathematics
(School Year Abroad, Barcelona 1974-75)

Ellen Canby Lynch
A.B. (1974)
House Counselor
Clement House

James Frederick Lynch
A.B. (1973)
Instructor in Mathematics
Registrar
(Abbot Academy, 1968)

Thomas Tolman Lyons
M.A.T. (1963)
Instructor in History and the Social Sciences

Dalton Hunter McBee
A.B. (1953)
Admissions Officer





FACULTY (continued)

John Claiborne McClement
Ed.M. (1952)
Instructor in Mathematics
Scheduling Officer

Barbara McDonnell
A.B., S.B. (1963)
Director of the Oliver Wendell Holmes Library

Peter Quackenbush McKee
Ed.M. (1947)
Associate Headmaster
Instructor in Physics on the Cecil F.P. Bancroft Foundation
Chairman of the Physics Department

John Kennedy McMurray
M.A.T. (1968)
Instructor in Art

Richard Stockton MacNeish
Ph.D. (1968)
Instructor in Archaeology
Director of the Robert S. Peabody Foundation for Archaeology

William Lawrence Markey*
D.M.L. (1954-57, 1960)
Instructor in French and Italian

Stephen Pike Marx
A.B. (1970)
Instructor in English and Art

Mary Sophia Minard
M.A.L.S. (1973)
Instructor in History and the Social Sciences
(Abbot Academy, 1961)

Joshua Lewis Miner
A.B. (1952)
Director of Admissions

Ronn Nels Minné
Ph.D. (1965)
Instructor in Chemistry
Chairman of the Division of Science

Clement Morell
A.M. (1958)
Instructor in Mathematics
Dean of Pine Knoll Cluster

Michael Edward Mosca
M.B.A. (1966)
Director of Accounting

Marianne Mulholland
B.S. (1974)
House Counselor
Abbey House

William Abbot Munroe
A.B. (1960)
Associate Treasurer

George A. Neilson, Jr.
Ed.M. (1972)
Business Manager

Gunilla Els-Charlotte Emelie Nilsson
M.A.T. (1972)
Instructor in English and Psychology

Daniel Dretzka Olivier
A.M. (1964)
Instructor in French
(Director, School Year Abroad, Rennes, France through 1976-77)

Harold Holmes Owen, Jr.
A.M. (1955)
Instructor in English
Chairman of the Special Committee on Performing Arts

Vincent Pascussi
A.M. (1964)
Instructor in Classics

Frederic Arnold Pease, Jr.
B.D. (1958)
Instructor in Religion
Director of the Community Service Program

David Albert Penner
A.M. (1966)
Instructor in Mathematics

Robert Peter Perrin
Ph.D. (1973)
Instructor in Mathematics and Physics

Stephanie Blake Perrin
M.A.T. (1973)
Instructor in Art and Psychology on the Abbot Academy Association Program
(Abbot Academy, 1968)

Frederick Almond Peterson*
A.M. (1946)
Instructor in English
Director of Research and Evaluation

Richard Sawyer Pieters
A.M. (1938)
Instructor in Mathematics on the Independence Foundation

Andrew MacIean Plummer
A.B. (1974)
Instructor in French

Virginia Powel*
B.Des. (1973)
Instructor in Art
(Abbot Academy, 1959)

Meredith Price
M.A.T. (1963)
Instructor in English
Dean of Summer Session



*on leave of absence

Edwin Gustavus Quattlebaum, III
Ph.D. (1973)
Instructor in History and the Social Sciences

Elaine Spatz Rabinowitz
M.F.A. (1974)
Instructor in Painting

Thomas Rees
Ph.D. (1960)
Instructor in Chemistry

Thomas Joseph Regan
A.M. (1955)
Instructor in English
Chairman of the English Department

Alexandra Kubler Rewis
M.A.T. (1973)
Counselor and Instructor in Psychology
(Abbot Academy, 1972)

John Richards, II
M.A.T. (1959)
Instructor in History and the Social Sciences
Dean of Rabbit Pond Cluster
Chairman of the Cluster Deans

Shirley Ritchie
S.B. (1973)
Instructor in Physical Education
(Abbot Academy, 1950)

Albert Karl Roehrig
Ed.D. (1954)
Instructor in Psychology
Director of Counseling
Chairman of the Department of Psychology

Lockard Row
M.B.A. (1973)
Comptroller



Harrison Schuyler Royce, Jr.
M.L.A. (1956)
Instructor in History and the Social Sciences

Angel Rubio y Maroto*
A.M. (1965)
Instructor in Spanish

Cristina Alonso Rubio*
(1973) licensed by the Spanish Academy of Performing Arts
Instructor in Dance
(Abbot Academy, 1965)

Jean Mary St. Pierre
A.M. (1973)
Instructor in English
(Abbot Academy, 1963)
(SYA–France, 1974-75)

Edward Jay Sarton
M.S.E. (1972)
Instructor in Physics
Chairman of the Andover Evening Study Program

William Louis Schneider
Mus.Ed.B. (1949)
Instructor in Music

Natalie G. Schoor
A.M. (1974)
Instructor in French

Gilbert Tennant Sewall, II
A.M. (1970)
Instructor in History and the Social Sciences

Marie Elizabeth Shaffer
A.B. (1974)
Assistant Director C.S.P.

Richard Eugene Sheahan
(1973)
Associate Secretary of the Academy
(Abbot Academy, 1964)

Gerald Shertzer
M.F.A. (1957)
Instructor in Art

Nancy Faust Sizer
A.M. (1973)
Instructor in History and the Social Sciences

Theodore Ryland Sizer
Ph.D., Ped.D., Litt.D. (1972)
Instructor in History and the Social Sciences
Headmaster

David Marshall Smith
A.M. (1972)
Instructor in English



Nathaniel Baldwin Smith
A.M. (1965)
Instructor in Mathematics
Dean of West Quadrangle North Cluster

John Macdonald Snyder
A.B. (1970)
Instructor in Art
Curator of Photography, Addison Gallery of American Art

Stephen Stanley Sorota
S.B. (1936)
Instructor in Physical Education

Francis Gordon Soule
M.D., F.A.C.P. (1970)
Medical Director

Alanson Perley Stevens, III
A.M. (1962)
Instructor in Russian
Chairman of the Russian Department

Frederic Anness Stott
A.B. (1951)
Secretary of the Academy

Hale Sturges, II
A.M. (1965)
Instructor in French
Chairman of the French Department

Catherine Jane Sullivan
Ed.M. (1973)
Director of Abbot Alumnae Affairs
(Abbot Academy, 1938)

Elwin Sykes
A.B. (1973)
Instructor in English

William Thomas
M.F.A. (1974)
Instructor in Music

John Gibson Tomlinson
S.B. (1966)
Director of Physical Plant

Mary Van Dusen
A.B. (1973)
Instructor in Remedial Language

Jesse Lawrence Vaughan
Th.M. (1972)
Instructor in Religion

Alexander Zabriskie Warren
M.A.L.S. (1963)
Instructor in Mathematics

Theodore John Warren, Jr.
B.D. (1973)
Instructor in Religion
Associate School Minister
(Abbot Academy, 1972)

Philip Brownlie Weld
M.S. (1951)
Instructor in Chemistry and Physics on the George Peabody Foundation
Chairman of the Chemistry Department

Joseph Belleau Wennik
A.M. (1967)
Instructor in German
Director, School Year Abroad 1974-75 Göttingen

Charles Eduardo Whitehead
M.A. (1973)
Instructor in Spanish

Lydia Whitehead
A.B. (1974)
House Counselor Sherman House

Stephen Whitney
A.M. (1936)
Instructor in French on the Elizabeth Milbank Anderson Foundation





Hilda Stroop Whyte
S.B. (1973)
Instructor in Physical Science
(Abbot Academy, 1967)

James Rae Whyte
S.T.M. (1966)
Instructor in Religion
School Minister
Chairman of the Religion Department

Barbara Wicks
(1974)
House Counselor Hall House

Stephen Wicks
(1973)
Instructor in Art
(Abbot Academy, 1972)

Henry Bond Wilmer, Jr.
A.B. (1970)
Instructor in French and Psychology

James Robert Wilson
Ph.D. (1967)
Instructor in Chemistry

Kenneth Kelly Wise
A.M. (1966)
Instructor in English

Anne Lise Witten
A.M. (1973)
Instructor in History and the Social Sciences on Jonathan French Foundation
(Abbot Academy, 1955)

Andrew Xenios
M.F.A. (1974)
Instructor in Art

Jack Saul Zucker
A.M. (1970)
Instructor in English



Teaching Fellows

Patrick Michael Collins
A.B. (1974)
Teaching Fellow in Art

Jane Frances Condon
Ed.M. (1974)
Teaching Fellow in English

Anne Detwiler
A.B. (1974)
Teaching Fellow in Classics

William Brinkley Harrison
A.B. (1974)
Teaching Fellow in Mathematics

Ted R. Heavenrich
A.B. (1974)
Teaching Fellow in Mathematics

Joan Adrian Holladay
A.B. (1974)
Teaching Fellow in French

Harriette Jane North
A.B. (1974)
Teaching Fellow in English

Donald Bacon Rollings
A.B. (1974)
Teaching Fellow in Spanish and Administration

Lisa Anne Russell
A.B. (1974)
Teaching Fellow in English

Ronald Dale Thorpe, Jr.
A.B. (1974)
Teaching Fellow in Classics

Sandra Ann Urie
A.B. (1974)
Teaching Fellow in Russian and Administration

Richard Griswold Woolworth, Jr.
A.B. (1974)
Teaching Fellow in History and the Social Studies

Faculty Associates

Yolanda R. Ballou, S.M.
Library Cataloguer

Margaret Couch, A.B.
Reserve Book Librarian

Kathleen Gonsalves, S.B.
Reference Librarian

Alice Hirst, R.N.
Director of Outpatient Department
Isham Infirmary-Hospital

Juliet Richardson Kellogg
Associate Archivist

Robert A. Leete
Manager of the Commons

Evangeline Merriam, A.B.
Technical Supervisor
Language Laboratory

Jeannette Granger Munroe
Hostess at the Underwood Room

Thomas Pool
Assistant Manager of the Commons

Ruth Matthews Roehrig, A.B.
Assistant Director
Audio Visual Center

Ann P. Royce
Assistant in Audio Visual

Carolyn D. Skelton, M.M.
School Organist

Rebecca Sykes
Coordinator of Social Activities

Margaret Towne, S.B.
Circulation Librarian

Sally Slade Warner
Assistant in Music Department

Louis J. Zuppardi
R.T., R.M.T.
Radiology Technologist

Phillips Academy Emeriti

Alice Thacher Whitney
Recorder, Emerita
Andover, 1902-1950

Guy Johnson Forbush, A.B.
Instructor in French, Emeritus
Andover, 1917-1920, 1924-1955

Douglas Mansor Dunbar, A.M.
Instructor in Mathematics, German and Bible, Emeritus
Andover, 1942-1958

M. Lawrence Shields, A.B.
Instructor in Biology and Secretary of the Academy, Emeritus
Marblehead, 1923-1960

Roscoe Edwin Everett Dake, S.B.
Instructor in Chemistry, Emeritus
Andover, 1921-1961

John Kingsbury Colby, A.M.
Instructor in Latin, Emeritus
Andover, 1940-1962

Miles Sturdivant Malone, Ph.D.
Instructor in History, Emeritus
Daytona Beach, Fla. 1937-1962

Elizabeth Eades, A.B.
Director of the Library, Emerita
Williamsburg, Va. 1929-1963

Roger Wolcott Higgins, A.M.
Instructor in English, Emeritus
Andover, 1933-1963

Emory Shelby Basford, A.B.
Instructor in English, Emeritus
Andover, 1929-1964

Floyd Thurston Humphries, A.B.
Instructor in French, Emeritus
Naples, Fla. 1937-1964

John Sedgwick Barss, A.M.
Instructor in Physics, Emeritus
Andover, 1923-1965

Donald Miller Clark, M.D.
Medical Director, Emeritus
Peterborough, N.H. 1954-1965

Elbert Cook Weaver, A.M.
Instructor in Chemistry, Emeritus
Madison, Conn. 1943-1965

George Grenville Benedict, A.M.
Dean of Students, Emeritus
Providence, R.I. 1930-32, 1933-67

Alexander Dunnett Gibson, A.M.
Instructor in French, Emeritus
McIndoe Falls, Vt. 1944-1967

Alan Rogers Blackmer
A.M., L.H.D.
Dean of the Faculty, Emeritus
Andover, 1925-1968

Kenneth Smith Minard, A.M.
Assistant Dean of Students, Emeritus
North Bridgton, Me., 1928-1968

Alfred Graham Baldwin
A.B., B.D., D.D.
Instructor in Religion, Emeritus
Andover, 1930-1968

Douglas Swain Byers, A.M.
Director of the Robert S. Peabody Foundation, Emeritus
Andover, 1933-1968

Cornelius Gordon Schuyler Banta, S.B.
Instructor in Mathematics, Emeritus
Andover, 1944-1968

John Bromham Hawes, Ed.M.
Instructor in English, Emeritus
Weston, Vt. 1933-36, 1939-68

Bartlett Harding Hayes, Jr., A.B.
Director of the Addison Gallery of American Art, Emeritus
Andover, 1933-1969

Frederick Johnson
S.B., Sc.D.
Director of the Robert S. Peabody Foundation, Emeritus
Andover, 1936-1969

Walter Gierasch, A.B.
Instructor in English, Emeritus
Pacific Grove, Calif. 1941-1970

Leonard Frank James, A.M.
Instructor in History, Emeritus
Medomak, Me., 1932-1970

Francis Bertrand McCarthy, A.B.
Instructor in English, Emeritus
Andover, 1941-1970

Alston Hurd Chase, Ph.D.
Instructor in Greek, Latin, and History, Emeritus
Berwick, Me. 1934-1971

George Knight Sanborn, S.B.
Instructor in Mathematics and Biology, Emeritus
Kennebunkport, Me., 1928-1972

James Hooper Grew, D.es L.
Instructor in French, Emeritus
North Andover, 1935-1972

Robert Whittemore Sides, A.B.
Director of Admissions, Emeritus
Marblehead, 1938-1972

Richard Valentine Healy, P.E.
Director of Physical Plant, Emeritus
Winchester, 1956-1972

Allan George Gillingham, Ph.D.
Instructor in Latin and Greek, Emeritus
Rochester, N.H. 1947-1974

Robert Edward Maynard, S.B.
Instructor in Mathematics, Emeritus
Andover, 1931-1974

William Russell Bennett, Jr., A.B.
Registrar, Emeritus
Walpole, Me. 1950-1974

Abbot Academy Emeriti

M. Dorothy Baker
Instructor in English, Emerita
Bath, England 1945-1950

Dorothea Wilkinson
Instructor in English, Emerita
Fredericton, N.H. 1939-1953

Marguerite Capen Hearsey
Headmistress, Emerita
Wellesley 1936-1955

Anna Roth
Instructor in History, Emerita
Franklin 1942-1956

Paul Werner
Instructor in Mathematics, Emeritus
Peterborough, N.H. 1956-1958

Kate Friskin
Instructor in Music, Emerita
Cambridge, 1925-1960

Mildred A. Hatch
Instructor in Latin, Emerita
Chester, N.H. 1946-1961

Harriet E. McKee
Instructor in Latin, Emerita
Harwich Port 1939-1961

Marjorie F. Stevens
Instructor in Mathematics, Emerita
Andover 1945-1961

Alice Curtiss Sweeney
Instructor in English, Emerita
Andover 1935-1961

Raymond Coon
Instructor in Music, Emeritus
Andover 1946-1962

Edith Temple Jones
Instructor in French, Emerita
Fairhaven, Vt. 1954-1967

Germaine Arosa
Instructor in French, Emerita
Essex 1945-1969







"A fantastic place for a serious, conscious person to expand and grow outside of the classroom. The chance to learn and profit from students of different backgrounds, ideals and religions is available for those who take the time to do it."
—Stanley B. Stolz '75

Andover students 73-74

*
Denotes Student Guide for the Admissions Office. These members of the Student Alumni Association have volunteered and been selected to show applicants and their families around the school.

(U) Upper Middler
(L) Lower Middler
(J) Junior

a

Adams, Philip Vangjel (L)
No. Andover, Mass.

Aibel, Daniel Walter (L)
Westport, Conn.

Aiello, Lloyd Paul (J)
Cambridge, Mass.

Aitken, Michael J. (L)
Bronxville, N.Y.

Albert, Joseph Franklin (U)
Croton-on-Hudson, N.Y.

Alexander, John T. (U)
Paris, Maine

Algrant, Daniel W. (L)
New York, N.Y.

Allen, Howard Douglas (L)
Lake Forest, Ill.

Allsopp, Jeffrey Forester (U)
Mill Neck, N.Y.

Alter, Jonathan, H. (U)
Chicago, Ill.

Alvero, Ruben John (L)
New York, N.Y.

Ancrum, Cheryl Denise (L)
Brooklyn, N.Y.

Andersen, Eric Lorang (U)
Columbus, Ohio

Anderson, Laura Baines (L)
Bristol, Conn.

Andrews, Jerome E., III (J)
Andover, Mass.

Androski, Frank Joseph (L)
No. Andover, Mass.

Androski, Joseph Mark (J)
No. Andover, Mass.

Appen, Carolyn Newton (L)
Tia Juana Estado Zulia
Venezuela

Arnold, Susan Lucille (U)
Ligonier, Pa.

Atwater, Elizabeth C. (U)
Wayzata, Minn.

Atwood, Bradford T. (L)
East Sandwich, Mass.

Auguste, Christopher S. (L)
New York, N.Y.

b

Babson, Richard Low (L)
Wellesley Hills, Mass.

Bache, Stephen K. (U)
Lavallette, N.J.

Bacher, Pamela (L)
Guildhall, Vt.

Bain, Laurie Ann (L)
Lowell, Mass.

Baker, Emerson Woods, II (L)
Fitchburg, Mass.

Baker, Ian Archibald (U)
3500 Honefoss, Norway

Ball, James Austin (U)
Boston, Mass.

Ballou, Elizabeth Brayton (U)
Providence, R.I.

*Balshi, Philip John (J)
Bethleham, Pa.

Barber, John William M. (L)
Middletown, Conn.

*Barnes, Hope (L)
Belmont, Mass.

Barnett, Janie S. (U)
Alexandria, Va.

Barrett, Jane E. (U)
Concord, Mass.

Barsamian, Lisa (L)
No. Andover, Mass.

Bates, Todd Banker (S)
Rochester, N.Y.

Baty, Thomas Gosney (U)
Pt. Reyes Sta., Calif.

Bauman, David F. (S)
New York, N.Y.

Bayard, Mareile Y. (J)
Andover, Mass.

Begley, Peter H. (L)
Stockbridge, Mass.

Bennett, Frank B. (U)
Vancouver 9 BC Canada

Bensley, Christopher B. (L)
Andover, Mass.

Bentley, James Allen, Jr. (J)
Bryn Mawr, Pa.

Berman Jack (U)
Moosup, Conn.

Bernard, Alicia (J)
New York, N.Y.

Bernard, Steven John (J)
Dracut, Mass.

Berry, Harold James, III (L)
Darien, Conn.

Berryman, Paul (U)
Yorktown Heights, N.Y.

Bilkey, Linda M. (U)
Huntington, L.I., N.Y.

Bird, Bruce Mackey (U)
Mountain Brook, Ala.

Bishop, Jennifer A. (U)
Tyringham, Mass.

Bishop, John Posey (U)
Portland, Ore.

Bissell, Henry F. (L)
Wallingford, Conn.

*Blackall, Grenville W. (U)
Cumberland, R.I.

Blackburn, Katherine E. (U)
Durham, N.C.

*Bliss, William Porter (U)
S. Portland, Maine

Bloom, Derek Anthony (J)
Worcester, Mass.

*Boal, Jean (U)
Larchmont, N.Y.

Bodenrader, Tami J. (L)
Andover, Mass.

Boit, Peter Goodrich (J)
Woods Hole, Mass.

Bolduc, Donald Francis (L)
Waterville, Maine

Bond, Annette Louise (U)
Kinshill P.O. St. Croix
U.S.V.I.

Boochever, T. Sloane W. (L)
Westwwod, Mass.

Bosell, Helen Theresa
Cleveland, Ohio

Boucher, William J. Jr. (L)
Andover, Mass.

Boumil, Thomas Michael (L)
Lowell, Mass.

Bowley, Susan M. (U)
Tewksbury, Mass.

Boylan, Ross Dickson (J)
New York, N.Y.



Bozek, Joan Leslie (U)
Dracut, Mass.

*Bradley, Robert Edward (U)
Chelsea, Mass.

Brainard, Edward C., III (L)
Marion, Mass.

Brennan, Richard Lee (U)
New York, N.Y.

Briggs, David Lee (U)
Methuen, Mass.

Briggs, John Wright (J)
Westport Point, Mass.

Briggs, Thomas Welles (U)
Oklahoma City, Okla.

Brisson, Beth Lee (U)
Haverhill, Mass.

Broaddus, Laura Wells (U)
Andover, Mass.

Brooksbank, Christopher J. (J)
Andover, Mass.

Brown, Derricke D. (L)
New York, N.Y.

*Brush, Thomas Hamilton (U)
Omaha, Nebraska

Bunnell, Thomas Govan (U)
Andover, Mass.

Burke, Brian Matthew (U)
Newton, Mass.

Burke, John Andrew (L)
Cohasset, Mass.

Burnham, Robert L. (L)
Andover, Mass.

*Burns, Lisa (L)
No. Andover, Mass.

Butler, Lewis (U)
San Francisco, Calif.

Buttenwieser, William L. (U)
New York, N.Y.

Buttrick, Jerome C. (J)
New York, N.Y.

Buttrick, John Ward (U)
New York, N.Y.

C

Caldwell, Cary Ames (L)
Andover, Mass.

*Cameron, Donna Lee (U)
Lawrence, Mass.

Cameron, Jo Anne (J)
Methuen, Mass.

Cameron, Timothy W. (U)
Charlotte, N.C.

Campbell, John William (U)
Bangor, Maine

Canning, Robert P. (J)
Babylon, New York

Canning, William M. (U)
Babylon, New York

*Cantor, Alan Mark (L)
Putnam, Conn.

Capeci, Susan Margaret (U)
Pelham Manor, New York

Caputo, Mark Louis (J)
Winchester, Mass.

Carley, Ellen McGuire (J)
Reading, Mass.





Carr, Ethan (L)
New York, N.Y.

Carson, Peter H. (L)
Laguna, Beach, Calif.

*Carter, Bailey, Jr. (U)
Chicago, Ill.

*Cartier, Veronica Isabel (L)
New York, N.Y.

*Castleman, Peter M. (U)
Nassau, Bahamas

Castro, Alejandro (L)
Bronx, N.Y.

Cate, Dennis Michael (J)
Lawrence, Mass.

Cavallari, Ford D., Jr. (J)
Chelmsford, Mass.

Caverly, Susan (L)
Andover, Mass.

Cerrone, Michael Angelo (U)
Cumberland, R.I.

Chadwick, Daniel (L)
Jamestown, N.Y.

Chadwick, George W. (L)
Duxbury, Mass.

Chalberg, James Jock (J)
Wheaton, Ill.

Chambers, William N. (J)
Hanover, N.H.

Chandler, C. Lloyd (U)
Lake Forest, Ill.

Chapin, Thomas Durfee (U)
Manchester, Conn.

Chapman, Catherine (U)
Tenafly, N.J.

Charboneau, Scott F. (U)
Warren, Mich.

Cheever, Frederic (J)
Ossining, New York

Chernow, Robert Michael (L)
Middletown, N.J.

*Chira, Susan Deborah (L)
Rye, N.Y.

Chory, John Henry (L)
Methuen, Mass.

Chotzinoff, Robin A. (L)
New York, N.Y.

Christian, Victoria Anne (U)
Englewood, N.J.

Christman, Jerryl Len (L)
Evansville, Ind.

Chung, Ann Lih (J)
Marblehead, Mass.

Claris, Chalmers D. (U)
Chapel Hill, N.C.

Clark, Charles Henry (U)
Providence, R.I.

Clark, Dorothy Gregory (L)
New Haven, Conn.

Clark, James McConnell (J)
Darien, Conn.

*Clark, William Goodman, Jr. (U)
Tuxedo Park, N.Y.

*Clemenson, Christian D. (L)
Humboldt, Iowa

*Cleveland, Sandra E. (L)
San Francisco, Calif.

Clinkenbeard, Steven E. (J)
New York, N.Y.

Clowney, William Clarke (J)
New Vernon, N.J.

Coben, Lawrence Stephen (U)
Livingston, N.J.



Cogan, Elizabeth (L)
Lowell, Mass.

*Cogan, George William (U)
New York, N.Y.

*Cogan, Ruth (U)
Lowell, Mass.

Cohan, Peter Marshall Ross (U)
Chapel, Hill N.C.

Cohan, Peter Samuel (U)
Worcester, Mass.

Cohan, William D. (J)
Worcester, Mass.

Cohen, David Stephen (L)
Andover, Mass.

Colby, Alfred Andrew (J)
Marblehead, Mass.

Colella, Stephen R. (L)
Centerville, Mass.

Colombo, Robert George (J)
Lynnfield, Mass.

Colombo, William Louis (L)
Lynnfield, Mass.

*Combs, Frank G. (L)
Arlington, Virginia

*Comerford, Mark John (U)
Lincoln, Mass.

Congdon, Charles Briggs (U)
Cross River, N.Y.

Connor, Michael E. (L)
Newburyport, Mass.

Conrad, Edward Craig (L)
Riverside, Conn.

Contarino, Carla (J)
No. Andover, Mass.

*Cook, Catherine Patterson (U)
Ithaca, New York

Cook, Esther Shears (U)
Andover, Mass.

Cooper, Daniel Scott
Denver, Col.

Costin, Patrick Sean (J)
Framingham, Mass.

Coulthard, David A. (U)
Andover, Mass.

Coward, Carroll Lambom (U)
Essex Fells, N.J.

Cox, Gerlad Frank (L)
Andover, Mass.

Craig, Andrew (U)
Washington, D.C.

Crawford, Thomas, N., II (U)
Denver, Colo.

Creedon, Bartholomew T. (U)
Pittsburgh, Pa.

Crichton, John Hayes (L)
Palm Beach, Fla.

Crowley, Denice L. (L)
Columbus, Ohio

Crowley, Elizabeth Edith (J)
Puerto Ordaz, Venezuela

*Crowley, John Stephen (U)
Puerto Ordaz, Venezuela

Crowley, Peter M. (J)
Davis, Calif.

*Cuevas, Cesar O.
Miami, Fla.

Curtis, Cassandra T. (L)
Wolfeboro, N.H.

*Curtis, Stephanie D. (U)
Lowell, Mass.

Cushing, John V. (J)
Wainscott, N.Y.

Cutter, Curtis Brooks (L)
Saville, Spain

d

D'Abre, Lisa Marie (J)
East Dennis, Mass.

Daniel, William W. (J)
Washington, D.C.

Daniels, Bryant Joseph (L)
Andover, Mass.

Daniels, Marianne (U)
Andover, Mass.

Daniels, Martha Beach (L)
Lincoln, Mass.

Darner, Wayne Ranney (U)
Wichita Falls, Texas

Davidson, Thornton, Louis (U)
Fresno, Calif.

Davis, Emilie Janet (U)
Ashby, Mass.

Davis, Gregory Cady (L)
Ashby, Mass.

Davis, John Meigs (U)
New York, N.Y.

Davis, John Totten (L)
Jerseyville, Ill.

Davis, Sarah Holbrook (U)
Osterville, Mass.

Day, Lee Garnett, III (L)
New Canaan, Conn.

DeCamp, Malcolm McAvoy, Jr. (U)
Louisville, Ky.

DeLucia, David Earl (L)
Andover, Mass.

deMontigny, Eric A. (J)
Billerica, Mass.

Dempsey, Timothy D. (L)
Interlaken, N.J.

DeNuzzio, John D.D. (J)
Methuen, Mass.

Denzer, Erik McKibbon (L)
Jamaica Plain, Mass.

Desiderato, Laurie Lynn (L)
New London, Conn.

Dewey, Ann Sheffield (U)
Worcester, Mass.

*Deyo, Catherine Anne (J)
No. Andover, Mass.

DiIorio, Mark Steven (L)
Andover, Mass.

Dilorati, Daniel Edward (U)
So. Boston, Mass.

DiPietro, Phillip, III (L)
Revere, Mass.

Donahue, Duncan Andrew (L)
Norwell, Mass.

*Donahue, Margo M. (U)
New York, N.Y.

*Donahue, Marion Casey (U)
New York, N.Y.

Donovan, Denault M. (L)
Lynnfield, Mass.

Dore, John Steven (L)
Dracut, Mass.

Dorsey, Peter Collins, Jr. (U)
Hamden, Conn.

Douglas, Cameron M. (L)
Chatham, Mass.

Dowd, Lawrence Martin, II (L)
Andover, Mass.

Dowd, Mary Austin (J)
Andover, Mass.

Downing, Holly (J)
Minneapolis, Minn.

Doyle, Gavin Joseph (L)
Rye Beach, N.H.

*Doyle, Lisa Ann (U)
Salem, Mass.

Draper, Timothy C. (L)
Atherton, Calif.

Drucker, Peter (U)
Oyster Bay, N.Y.

Duble, Peter Wright, Jr. (U)
North Haven, Conn.

Dumais, David Joseph (L)
Summit, N.J.

Durrett, Bryan P. (J)
Salem, N.H.

Duval, Martha (J)
Bronx, N.Y.

e

Earisman, Charles Scott (U)
E. Orange, N.J.

Eaton, Pamela Jean (L)
Andover, Mass.

Eccles, Isabel M. (U)
Andover, Mass.

Eich, Edward Keith (U)
Chelsea, Mass.

Elberson, Charles Evans, II (L)
Winston-Salem, N.C.

Eldrenkamp, Paul H. (U)
Britt, Ohio



*Elias, Felecia S. (U)
No. Andover, Mass.

Ellis, William Albert (L)
Gloucester, Mass.

Ellison, David Lee (L)
Albany, N.Y.

Elmer, Edward Burns (L)
Andover, Mass.

England, Benjamin M. Jr. (L)
Pittsfield, Mass.

Epler, Palmer York, III (U)
Stratford, Conn.

Eubank, Stephen G. (U)
Summerville, S.C.

Exstein, Ted Hausmann (L)
New York, N.Y.

f

Farrell, Bowen Cooper (J)
Los Angeles, Calif.

Farrell, John C. (J)
Agana, Guam

*Finch, Virginia Courtney (U)
Raleigh, N.C.

Fink, Nancy Allison (U)
Chicago, Ill.

Finn, Christopher (U)
Ardsley-On-Hudson, N.Y.

Finney, Howard, IV (U)
Montclair, N.J.

Finnie, Matthew B. (U)
Princeton, N.J.

Firestone, Diane E. (L)
Southern Pine, N.C.

Fish, Jason M. (L)
Brooklyn, N.Y.

Fleming, Michael A.A. (U)
New Haven, Conn.

Fletcher, Phillip D. (U)
New York, N.Y.

Florence, John Orion, Jr. (U)
Princeton, N.J.

*Flynn, Harrison Francis (U)
No. Hollywood, Calif.

Forsyth, Mark Keene (U)
Webster, N.Y.

Foster, Franklin Whitington (L)
Glyndon, Md.

Fowkes, Robert John (L)
So. Boston, Mass.

Fox, Christopher Allen (J)
Summit, N.J.

Fraker, Mark Richardson (L)
Mill Valley, Calif.

Francis, Thomas Briggs (U)
Pebble Beach, Calif.

Freed, Katherine (L)
New York, N.Y.

French, John Sargent (U)
Marblehead, Mass.

French, John Stuhr (L)
Moline, Ill.

French, Thomas Davies (J)
Andover, Mass.

Friese, Elizabeth N. (L)
Pleasantville, N.Y.

*Fuller, Charles P.G., II (U)
Washington, D.C.

g

Galbiati, James W. (L)
Andover, Mass.

*Gallagher, Peter David (U)
Melrose, N.Y.

Galvin, Michael Joseph (U)
Greenwich, N.Y.

Gangi, Paul Michael (L)
Methuen, Mass.

Gansmiller, Drew (U)
Sausalito, Calif.

Garcelon, John Herrick (L)
Manama, Bahrain
Arabian Gulf

Gardner, John Frederick (L)
Bethany, Okla.

Garry, Bert James (U)
Beverly, Mass.

*Gates, Sarah MacMillan (L)
Portland, Ore.

Gavin, Colin Gene (U)
Sacramento, Calif.

Gay, Ebenezer Roberts (J)
Hingham, Mass.

*Geier, Bradley Alden (U)
Moraga, Calif.

Gifford, Charlotte E. (L)
No. Andover, Mass.

Gilmour, David Lloyd (L)
New York, N.Y.

Gleason, Amy Louise (L)
Wareham, Mass.

Goclowski, Michael J. (U)
Andover, Mass.

Godly, Martin Arthur T. (U)
Matawan, N.J.

Goldberg, Steven Bernard (U)
Jamaica, N.Y.

Goldstein, Joseph Michael (L)
Andover, Mass.

Goodman, Jay Howard (J)
Lawrence, Mass.

Goodwin, Ann Walton (U)
Harwinton, Conn.

Gordon, Amy (L)
Tuxedo Park, N.Y.

Gordon, Lawrence Miller (U)
Boston, Mass.

Gottsegen, Michael Glen (L)
Leominster, Mass.

Gourevitch, Marc (L)
Middletown, Conn.

Goyer, John Henry (U)
Chapel Hill, N.C.

Grange, Mark Keith
Babylon, New York

Greeff, David Chapin (U)
New York, N.Y.

Greene, George R., Jr. (J)
Raleigh, N.C.

Greenfield, Ellen B. (L)
Bronx, N.Y.

Griffith, John C. Jr. (L)
Quogue, L.I., N.Y.

Grinder, Jonathan H. (L)
Scottsdale, Ariz.

Griswold, Scott Thomas (L)
Ridgewood, N.J.

Gross, Lori Lynn (L)
Andover, Mass.

Grossman, Elizabeth (U)
New York, N.Y.

h

Hager, Frederick Hill (U)
Shorthills, N.J.

Hale, Dorothy (U)
Toms River, N.J.

Hale, Timothy J. (L)
Jackson, Miss.

Hall, Christopher R. (J)
Winchester, Mass.

Hamilton, Royal D. (J)
Bronx, N.Y.

Hamilton, William G. Jr. (U)
Englewood, N.J.

Hammar, Mark Eugene (U)
St. Paul, Minn.

Hammond, Matthew C. (U)
Andover, Mass.

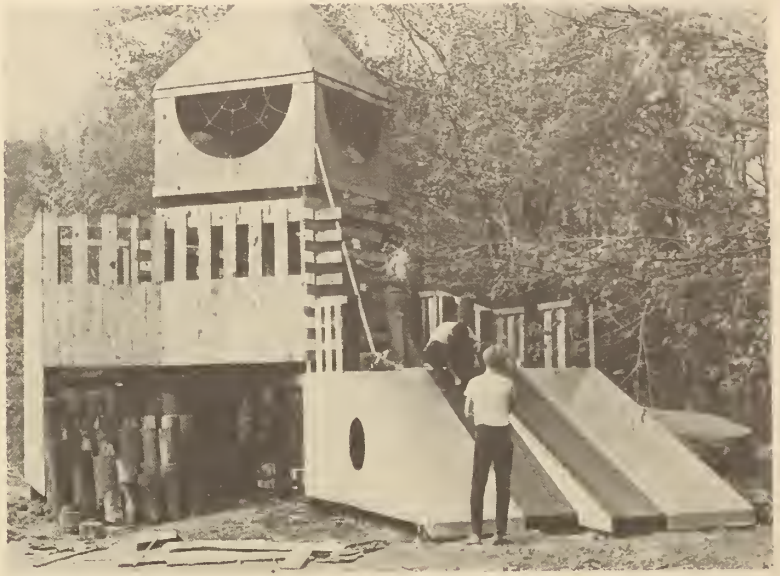
Harding, Michael L. (U)
Omaha, Neb.

Harhen, Robert P. (L)
Andover, Mass.

Harrison, Jody E. (U)
Eugene, Ore.

Harrison, Michael K. (J)
Eugene, Ore.

Harriss, Gail C. (U)
Lynnfield, Mass.



Harsham, Cecily C. (U)
Englewood, N.J.

Hartwell, Charlotte M. (J)
New York, N.Y.

Hartwell, Jill (L)
Wayzata, Minn.

Harvey, Winthrop C. (U)
Wellesly Hills, Mass.

Haslun, William L, II (L)
Granby, Conn.

Helfer, Tony H. (L)
Middletown, Conn.

Heller, Edward B. (U)
Beachwood, Ohio

Heller, Kate Lawrence (L)
New York, N.Y.

Hemminger, Daniel W. (L)
St. Petersburg, Fla.

Henderson, William D. (J)
Andover, Mass.

Hersh, Richard G. (U)
Peekskill, N.Y.

Hester, Bettina Ann (L)
Nashville, Tenn.

*Higginson, Charles, Jr. (L)
Algers, Algeria

Higginson, Timothy B. (J)
Washington, D.C.

Hill, Benjamin H. (L)
Houston, Texas

Hill, Russell R. (L)
Lake Forest, Ill.

Ho, Ying-Dat (J)
Sabah, Malaysia

Hofer, Timothy P. (U)
New York, N.Y.

Hooker, Samuel (L)
Brooklyn N.Y.

Hoover, Jane C. (L)
North Canton, Ohio



Horowitz, Charles J. (L)
Scarsdale, N.Y.

Horowitz, Dana Susan (U)
Scarsdale, N.Y.

Houstanitis, Arthur (J)
Lowell, Mass.

Howard, Laurence B. (L)
Nashville, Tenn.

Howe, Robert W., Jr. (L)
Walpole, Mass.

Howland, Meredith (L)
Lynnfield, Mass.

Hoy, Amory Ann (L)
Lake Forest, Ill.

Hsieh, Michael T. (L)
White Plains, N.Y.

Huber, Evans (U)
Montclair, N.J.

Hubshman, Peter J. (U)
New York, N.Y.

Hueber, Philip B. (U)
Syracuse, N.Y.

Hulme, Alfred P., Jr. (U)
Madison, Conn.

Hurlin, William John (L)
Andover, Mass.

i

*Isbrandtsen, Andree (L)
Riverside, Conn.

Iselin, William J., II (J)
New York, N.Y.

Isham, Sandra C. (L)
Bridge Hampton, L.I.

j

James, Steven P. (L)
Methuen, Mass.

Jameson, Robert H. (U)
New York, N.Y.

Janneh, Doudou B. (L)
Bathurst, Gambia

Javitch, Jonathan A. (L)
Harrisburg, Pa.

Jewett, Harry, M., III (J)
Grosse Pointe Farms, Mich.

Jewkes, Claire F. (U)
State College, Pa.

Johnson, Livingston
Princeton, N.J.

Johnson, Todd W. (L)
Nashua, N.H.

Johnston, Jan M. (U)
Aruba, Netherlands, Antilles

Jones, Fern Bernadette (U)
Raleigh, N.C.

Joyce, Ann Robinson (L)
Somerset, N.J.

Juviler, Gregory Geoffry (L)
New York, N.Y.

k

Kalter, Bruce Tracy (U)
Holyoke, Mass.

Kang, Tong Woo (U)
Ohta-ku, Tokyo, Japan

Kao, Peter Nicholas (U)
Pound Ridge, N.Y.

Kapetan, Christine C. (U)
Fairfield, Conn.

Karlsson, Leif B. (L)
Providence, R.I.

Katayama, Robert N. (L)
Washington, D.C.

*Katz, Daniel F. (U)
Woodbridge, Conn.

Kavanagh, William J., III (U)
Westford, Mass.

Kazarosian, Paula V. (L)
Haverhill, Mass.

Keeler, Wendy Pullen (L)
Providence, R.I.

Kehm, Carl Burdett (U)
Scarsdale, N.Y.

Kell, Arthur Scott (U)
Winchester, Mass.

*Kemp, Lawrence Goodwin (U)
Omaha, Neb.

*Kennedy, Louise Avery (J)
Dayton, Ohio

Kenny, Brian James (L)
Lawrence, Mass.

Kenny, Keith Raymond (U)
Andover, Mass.

*Kent, Marguerite (U)
Andover, Mass.

Kent, Stephen Robert (L)
Andover, Mass.

Killian, Betsy Lee (L)
Philadelphia, Pa.

Killian, Earl Abraham, III (U)
Westborough, Mass.

Kilroy, Oliver Boyd (L)
Tucson, Ariz.

Kimball, Joan H. (L)
Ridgefield, Conn.

Kimball, Nicholas H. (U)
Andover, Mass.

King, David J.S. (U)
Hong Kong

King, Richard Bruce, III (U)
Lincoln, Mass.

Kingery, John Bradford (U)
Portland, Ore.

Kirby, David Nicholas (L)
New Rochelle, N.Y.

Kirchwey, George A. (U)
Lausanne, Switzerland

Kirsch, Robert Clifford (U)
Methuen, Mass.

Kjellstrom, Carina B. (L)
Pound Ridge, N.Y.

Klimley, Brooks James (U)
Chicago, Ill.

Knauss, Elizabeth Pond (L)
Poughkeepsie, N.Y.

Knight, Elizabeth Ann (L)
Sherborn, Mass.

Knowles, James A. (J)
Yarmouth, Maine

Kohn, Roger Seth (U)
Washington, D.C.

Korba, Ellen Ann (L)
Andover, Mass.

Kowal, Stephen A. (U)
Pelham, N.Y.

Kramer, Louise E. (U)
Port Washington, N.Y.

Krivobok, Karin F. (L)
Andover, Mass.

Krumpe, Andrew C. (J)
Andover, Mass.

Kufferman, David L. (L)
Fairfield, Conn.

Kurth, Cornelia L. (U)
Andover, Mass.

Kvam, Jan Kornelius (L)
Bergen, Norway

L

Labrie, Cannon Marcus (U)
Andover, Mass.

Lambiris, Susan Keith (U)
Andover, Mass.

Landise, Thomas H. (L)
Summit, N.J.

Large, Thomas Hallett (L)
Holidaysburg, Pa.

Larriuz, Angel Manuel (L)
Brooklyn, N.Y.

Laskey, Louis Edward (U)
Hyannis, Mass.

Laverack, Elizabeth (J)
Andover, Mass.

Lavin, Franklin L. (U)
Canton, Ohio

Lee, Frank Parker (U)
Wichita Falls, Texas

Lee, Robert Wonhoon (J)
Englewood Cliffs, N.J.

Lemon, Edward R. (L)
Pound Ridge, N.Y.

Lenk, Robert Williams (U)
China, Maine

Lentz, Evelyn Ann (L)
No. Andover, Mass.

Lenz, John Richard (U)
Huntington, N.Y.

Letourneau, Mona G. (U)
Andover, Mass.

Letsou, Anthea (J)
Lowell, Mass.

Letsou, George V. (U)
Lowell, Mass.

Leung, Jonathan T. (U)
Kowloon Hong Kong

Levin, Helen (U)
Winston-Salem, N.C.

*Levine, Marc Dixon (L)
Ridgewood, N.J.

Lewis, Deborah Ruth (U)
Huntington, W. Va.

Lewis, Thornton David (L)
Ridgefield, Conn.

Liberman, Laura (J)
Newton Centre, Mass.

Lieberfeld, Daniel, II (J)
New York, N.Y.

Lilley, Douglas Taylor (L)
Chevy Chase, Md.

Lind, Kate Humbird (L)
New York, N.Y.

Linehan, Jennifer (L)
Hamilton, Mass.

Linn, Timothy H. (U)
Zanesville, Ohio

Lintel, Alan Whitworth (U)
Syracuse, N.Y.

Liponis, Mark James (L)
Andover, Mass.

Lloyd, Benjamin (J)
Andover, Mass.

Lockhart, Nancy A. (L)
Peoria, Ill.

Lockwood, Rebecca (U)
Prides Crossing, Mass.

Lombardi, Tarky J., III (J)
Syracuse, N.Y.

Long, Clifton John (L)
Shrewsbury, Mass.

Loo, Carl Arthur K.H. (U)
Hong Kong, B.C.C.

Lord, Amy Holliday (L)
New Britain, Conn.

*Lord, Pamela (L)
Concord, Mass.

Loughman, Brian W. (J)
Osterville, Mass.

*Luceri, Thomas Joseph (U)
Andover, Mass.

*Luhrmann, Tanya Marie
Englewood, N.J.

*Lunder, Deborah (U)
No. Andover, Mass.

Lundergan, Timothy Patrick (U)
Salem, Mass.

Lynch, Daniel Seth (L)
Andover, Mass.

m

*McCabe, Robert Emmit, III (L)
Englewood, N.J.

McCarn, Michael J. (L)
Rockville, Md.

*McClement, John Hall (U)
Andover, Mass.

McCulloch, Andrew Houston (L)
Greenwich, Conn.

McDowell, Jeffrey James (U)
Andover, Mass.

McDowell, Kirk Dougall C. (U)
Portland, Ore.

McDuffie, Carrington H. (L)
Bedford Hills, N.Y.

MacFarlane, Lisa (U)
Aruba, Netherlands Antilles

McGillivray, Burton E. (U)
Cloquet, Minn.

*McKee, Patricia Benke (J)
Andover, Mass.

McKusick, Scott A. (U)
Andover, Mass.

McNamara, Kevin Robert (U)
Short Hills, N.J.

McNamee, Giles W. (U)
Loudonville, N.Y.

McNicol, Paul M. (U)
New York, N.Y.

MacWilliams, William B. (J)
Gladwyne, Pa.

Macauley, John Blair (U)
Cohasset, Mass.

Mack, Stephen Lloyd (U)
Miami, Fla.

*Mackintosh, Susan F. (U)
Grenada, West Indies

Mackor, Paula Ann (U)
No. Andover, Mass.

Maher, Timothy Cameron (L)
Andover, Mass.

Malis, Daniel Mark (L)
Lawrence, Mass.

Mann, George Wilbur (U)
Providence, R.I.

*Manzi, Lisa Angela (J)
No. Andover, Mass.

Maranto, Anthony Rosario (U)
Chicago, Ill.

Marinangeli, Michael, J.R. (U)
New York, N.Y.

Marks, Evan Mitchell (U)
Poughkeepsie, N.Y.

*Martin, Claritta E. (U)
Bon/Rhein, West Germany

Martin, Martha L. (L)
Amherst, N.H.

Marvin, Bradford, Jr. (U)
Marblehead, Mass.

*Marvin, William Warwick (U)
Wayzata, Minn.

Mashabela, Victor L. (L)
Johannesburg, South Africa

Masters, Clarendon Hugh (U)
Pembroke, Bermuda

May, Thomas Knowles (L)
Washington, D.C.

Mayer, Edward S. (U)
Greenwich, Conn.

Maynard, Walter A. (L)
E. Hampton, N.Y.

Meredith, Thomas Thorett (U)
Williamsport, Pa.

Merrill, Robert Alexander (L)
New York, N.Y.

Merritt, Robert Ed., Jr. (U)
Mt. Airy, N.C.

Metcalf, John Trumbull, III (U)
Chevy Chase, Md.

Meuser, Kenneth Marshall (U)
Duxbury, Mass.

Mickle, Stuart H. (L)
New York, N.Y.

Middlebrook Robert G. (L)
Needham Heights, Mass.

Miers, Charles R. H. (U)
Athens, Ohio

Migdol, Jonathan Lawrence (L)
Leominster, Mass.

*Miller, Kimberly L. (U)
Andover, Mass.

Mirza, Zareen Anne (U)
Falmouth, Maine

Mitchell, Peter Bruce (U)
Dobbs Ferry, N.Y.

*Mleczko, Sarah E. (L)
Wilton, Conn.

Monroe, Yvonne L. (L)
Alfred, N.Y.

Moody, Richard Blakely (J)
Andover, Mass.

Moore, Mitchell Thomas (L)
Ormond Beach, Fla.

Morgan, Fern Lisa (U)
New York, N.Y.

Mudge, Jonathan E. (U)
South Laguna, Calif.

Muldoon, Robert A., Jr. (J)
Andover, Mass.

Mullen, Christopher A. (L)
Tampa, Fla.

Mullen, Mark McNally (U)
Tampa, Fla.

Munkenbeck, Anne (U)
Old Greenwich, Conn.

Munro, Robert Alexander (U)
Marblehead, Mass.

Munson, Shipley John (L)
New York, N.Y.

Murdoch, Michael B. (L)
St. Louis, Mo.

Murphy, Dennis F. (L)
Malden, Mass.

Murphy, Katherine (U)
Washington, D.C.

Murray, Paul Earle (U)
Birmingham, Ala.

n

Nahas, Anthony E. (U)
Englewood, N.J.

Nahill, Sharon Rose (L)
Methuen, Mass.

Nance, Dana Walter (U)
Indianapolis, Ind.

Neilson, Ruth (U)
Malvern, Pa.

*Nelson, Gordon Lyle, Jr. (U)
No. Granby, Conn.

Neslo, Hendrik J. (J)
Brooklyn, N.Y.

Neumann, Lee Duane (L)
Swampscott, Mass.

Nguyen, Nguyen Trang (L)
Saigon, South Vietnam

Nicholson, Sara L. (L)
Antigua, West Indies

Nicolosi, Diane Mary (L)
Methuen, Mass.

Nicolosi, Joseph Vincent (U)
Andover, Mass.

Nicolosi, Rosemary B. (U)
Methuen, Mass.

Niziak, Craig Charles (U)
Andover, Mass.

Norman, Margaret (J)
Palisades, N.Y.

North, Cecil Jackson, III (J)
Mt. Kisco, N.Y.

Nourse, Victoria F. (L)
Marblehead, Mass.

o

O'Brien, Kelly Shaun (L)
Melrose, Mass.

*Ordway, Constance (L)
Hickory Corners, Mich.

*O'Reilly, Mary-Jo (U)
Andover, Mass.

Otto, Jonathan B. (U)
Sands Point, N.Y.

Owen, Matthew Minot (U)
Andover, Mass.

p

Palmer, William Ewing (L)
Rector, Pa.

Pappas, George James (U)
Dracut, Mass.

Paradis, David H. (J)
Louisville, Ky.

Parikh, Sagar V. (U)
Nelson, B.C., Canada

Park, Lisa Chase (J)
Portland, Ore.

Parke, Lissa Ann (U)
Meriden, Conn.

*Parker, Elizabeth Ashton (L)
New York, N.Y.

Parmelee, Jennifer B. (L)
Greenwich, Conn.

Partington, Bartholomew J. (L)
Stamford, Conn.

*Pascale, Lia Nancy R. (L)
Canton, Ohio

Pascucci, V. Scott (L)
Andover, Mass.

Patkin, Louis Steven (U)
Swampscott, Mass.

Patton, Kimberley (U)
Danvers, Mass.

Pawlowski, Ann Margaret (L)
Lynnfield, Mass.

Pearson, Scott Ray (U)
Miami, Fla.

Pease, Carol Lewis (U)
Kensington, Conn.

Pease, Ruth Elizabeth (J)
Andover, Mass.

Peck, Jennifer Lynn (L)
Barnard, Vt.

Pelletier, Karen Ann (U)
Andover, Mass.

Penick, Sydnor B., IV (L)
Princeton, N.J.

Pennick, Carol B. (L)
New York, N.Y.

Penniman, Paul K. (U)
Pleasantville, N.Y.

Perley, Jefferson Glen (J)
Concord, Mass.

Perry, Priscilla (U)
Marblehead, Mass.

*Peters, Susan Wheeler (U)
Duxbury, Mass.

Peterson, John Taylor (L)
Andover, Mass.

*Phillips, Elliott H. Jr. (U)
Grosse Pointe, Farms, Mich.

Phipps, Howard, III (L)
Westbury, N.Y.

*Pietrafesa, Richard C., Jr. (U)
Syracuse, N.Y.

Pinero, Edwin (L)
Bronx, N.Y.

Plagenz, Martha (J)
Lakewood, Ohio

Ponty, Caren Marjorie (U)
Andover, Mass.

Pool, Adam deSola (L)
Cambridge, Mass.

Poole, Christopher L. (J)
Jeddah, Saudia Arabia

Porter, Annette (J)
Caracas, Venezuela

Potash, Patricia Anne (J)
Dalton, Mass.

Prentakis, Anthony (U)
Lowell, Mass.

Prentakis, Constantine (L)
Lowell, Mass.

Price, John Charles (L)
State College, Pa.

Procopio, Vittorio, P. (U)
Andover, Mass.

*Pucillo, Anthony (U)
E. Braintree, Mass.

Purta, David Anthony (U)
Hinckley, Ohio

Putman, Sheridan L. (U)
Toledo, Ohio

Pyun, Eumi (J)
Andover, Mass.

q

*Quinn, Kathleen (U)
No. Andover, Mass.

r

Rainville, Karen Andrea (U)
Methuen, Mass.

Ratcliffe, Michael John (U)
Montreal, Quebec, Canada

Raymond, Allen Edward (L)
Litchfield, Conn.

*Redman, Elizabeth R. (U)
Andover, Mass.



Reed, Wrenn D. (U)
Amherst, Mass.

Remeis, Paul John (L)
Andover, Mass.

Rhangos, William Charles, Jr. (L)
Savannah, Ga.

Rice, James Lowry, III (U)
New Orleans, La.

Rich, Timothy Carter (U)
Fairfield, Conn.

*Richards, Pamela M. (L)
Andover, Mass.

Richardson, R. Hunt (J)
New York, N.Y.

Richman, Todd Ira (U)
Marblehead, Mass.

Rifkind, Barbara (L)
Dobbs Ferry, N.Y.

Riker, Anne Lawrence (U)
New York, N.Y.

Riker, Richard Story (J)
New York, N.Y.

Rimsky, Don
Port Washington, N.Y.

Risbergs, Martin (L)
Babylon, N.Y.

Risk, Victoria R. (L)
West Cummington, Mass.

Ristuccia, Daniel Peter (U)
Andover, Mass.

Rivera, Jose Manuel (J)
New York, N.Y.

Rivers, Brian John Henry (L)
New York, N.Y.

Roberts, Clarisse deRham (L)
Princeton, N.J.

Robertz, Paul J. (J)
Manchester, Mass.

*Rockwell, Nancy Griffin (L)
Weston, Conn.

Rockwell, William Bradford (L)
No. Andover, Mass.

Rodriguez, Pedro A. (U)
Lawrence, Mass.

Roe, Anthony Howard (J)
Stonybrook, N.Y.

*Rogers, Deborah K. (U)
Andover, Mass.

Rogers, Thomas K. (U)
Hudson Falls, N.Y.

Rohrbach, Katherine (U)
Storrs, Conn.

Rokous, John Joseph (L)
No. Andover, Mass.

Rolett, Barry Vladimir (L)
Chapel Hill, N.C.

Rolett, Roderic Lawrence (U)
Chapel Hill, N.C.

*Rollings, Anne Weeks (U)
Tucson, Arizona

Rome, Laura Ellen (L)
Leominster, Mass.

*Ronan, Kathryn (L)
Marblehead, Mass.

Roome, Peter Willemse (U)
Greenwich, Conn.

*Roscoe, Elizabeth K. (L)
Hingham, Mass.

Rose, Nancy Austin (U)
Duxbury, Mass.

Rosen, David M. (U)
Haverhill, Mass.

Rosenberg, Neil J. (L)
Andover, Mass.

Rosenfeld, Steven (J)
Lawrence, Mass.

Rossetter, George Torrey (U)
Peoria, Ill.

*Rouse, Roger Dean (L)
Dayton, Ohio

Row, Walter A., III (L)
Weston, Mass.

Roy, Tapon (L)
Chapel Hill, N.C.

S

Sack, Emily Joan (L)
Marblehead, Mass.

St. Jean, Nancy Anne (L)
Andover, Mass.

St. Louis, Peter (L)
Methuen, Mass.

Salvo, Joseph James (I)
Lawrence, Mass.

Samuels, Neil D. (L)
New York, N.Y.

Samuels, Wayne Todd (U)
Reading, Mass.

Sanchez, Carlos Francisco (U)
Los Angeles, Calif.

Sanchez, Julio (U)
Bronx, N.Y.

Sanders, Anthony Ridder (U)
New York, N.Y.

*Saunders, Hope (U)
Tewksbury, Mass.

Schaff, Peter Harris (L)
Youngstown, Ohio

Scheer, William Richard (L)
Poughkeepsie, N.Y.

*Schiewetz, Mark Burt (L)
Wilmington, Del.

Schofield, Thomas (L)
Weston, Mass.

Schwartz, Pamela Susan (L)
Methuen, Mass.

Schwarz, Kurt Allan (U)
Schenectady, N.Y.

Sconyers, Wendell Remon (L)
Chicago, Ill.

Scott, Davenport, Jr. (U)
Orlando, Fla.

Segal, Deborah Carrie (J)
No. Andover, Mass.

Segal, John Andrew (U)
No. Andover, Mass.

Sellars, Peter M. (U)
Pittsburgh, Pa.

Senior, Elizabeth A. (L)
Middlebury, Conn.

Shaker, Leonard Howard (U)
Andover, Mass.

Sheffield, Eulah (J)
Middletown, R.I.

Shellman, Michael Joseph (J)
Norwalk, Conn.

Shionis, Mark Christopher (L)
Andover, Mass.

Shoemaker, John Nixon, Jr. (L)
Wyoming, Pa.

Shon, Richard Chee (L)
Naha, Okinawa, Japan

Silverman, Kurt (U)
Haverhill, Mass.

Simmers, Edward Allen (U)
Charleston, W. Va.

Siragusa, Ross David, III (L)
Lake Forest, Ill.

Sizer, Judith Ryland (J)
Andover, Mass.

Sizer, Theodore, II (U)
Andover, Mass.

Skokan, Frank Joseph (U)
Bronx, N.Y.

Slade, Shelley Rodes (L)
New York, N.Y.

Slater, Steven David (L)
Andover, Mass.

Smith, Debra Jean (L)
Cleveland, Ohio

Smith Elizabeth (L)
New Haven, Conn.

Smith, Richard Norton (L)
New York, N.Y.

Smith, Samuel Prescott (U)
Wolfeboro, N.H.

Smith, Sandra E. (U)
Marblehead, Mass.

Smith, Thorn McClellan (L)
Peoria, Ill.

Smolevitz, Paul Roy (U)
Pittsburgh, Pa.

Snedeker, William Audley (U)
Andover, Mass.

Snelling, Elizabeth H. (U)
Allentown, Pa.

Sobil, Marc Jeffrey (L)
Lawrence, Mass.

Soling, Lora Ellen (U)
Pound Ridge, N.Y.

*Solomon, Roslyn (J)
Bellingham, Wash.

Somers, Michael E. (J)
Olympia Fields, Ill.

Sonnier, Elizabeth (J)
No. Andover, Mass.

Spangler, Kim W. (U)
Bryan, Ohio

*Spiegel, Lisa Ann (L)
Andover, Mass.

Spound, David Andrew (L)
Leominster, Mass.

Spound, David Andrew (U)
Leominster, Mass.

Springer, John Adolph (J)
Cannon Falls, Minn.

Stahl, Deborah Jean (U)
Andover, Mass.

Steele, Benjamin Killam, Jr. (U)
Rochester, N.Y.

Stein, Jonathan Alan (U)
Convent Station, N.J.

Stengel, Heather Howard (U)
West Harwich, Mass.

Stern, Margaret Adele (U)
New York, N.Y.

Stevens, Sarah Elizabeth (U)
Andover, Mass.

Stevens, Seth Richard (L)
Shawnee Mission, Kan.

Stevenson, Walker (J)
Niantic, Conn.

Stites, Louise Patterson (L)
Louisville, Ky.

Stocker, Lewis M. (U)
Andover, Mass.

Stolz, Stanley Burr (U)
Christiansted, St. Croix
Virgin Islands

Stone, Dan Gilbert (L)
Centerport, N.Y.

Stowe, Darryl W. (J)
Carlisle, Mass.

Street, Oswald Charles (L)
Chelmsford, Mass.

Strong, Roger Leon, Jr. (U)
New York, N.Y.

Suisman, Charles Alex (L)
West Hartford, Conn.

Sullivan, Gregory F. (L)
Greenwich, Conn.

Sullivan, Richard (J)
Wakefield, Mass.

Sun, Steven John (U)
Taipei Taiwan

Suslovic, Edward James (J)
Methuen, Mass.

Suslovic, Paul John (U)
Methuen, Mass.

Sutton, Holland M. (U)
Tahoe City, Calif.

Sweaney, Martin J. (J)
Omaha, Neb.

Sweeney, John Clinton (L)
Concord, Mass.

Swing, Jennifer (U)
Salisbury, Conn.

Szczepanik, Stephen Henry (U)
Dracut, Mass.

t

*Tay, Wendy Joan (J)
Andover, Mass.

Taylor, Sandra Lee (L)
Dhahran, Saudi Arabia

*Thomas, Anita Marie (L)
Andover, Mass.

Thomas, Danforth Wyllys (U)
Kalamazoo, Mich.

Thomas, Stephanie K (U)
Great Falls, Va.

Thompson, Frederick G. IV (J)
St. Joseph, Mo.

Thorndike, Robert A., II (U)
Chestnut Hill, Mass.

Tishman, Steven Morse (L)
New York, N.Y.

Tobeason, Hans Fredrik (L)
Far Hills, N.J.

Townsend, Thatcher L., III (L)
Winston-Salem, N.C.

Trafton, John Wiggin (U)
Auburn, Maine

Trustman, Laurie Sue (U)
Palm Beach, Fla.

Turino, James Gerard (L)
Alpine, N.J.

Turner, Darryl DeWitt (L)
Cleveland, Ohio

*Turner, James Riford (L)
Pittsford, N.Y.

Tuttle, Garrett Muir (L)
Darien, Conn.

Tweedy, Jonathan Weed (U)
Darien, Conn.

Tydings, Millard E., III (L)
Havre de Grace, Md.

u

Updike, David H. (U)
Ipswich, Mass.

v

Van Anda, Diana (U)
West Nyack, N.Y.

Van Atta, Matthew Michael (U)
W. Des Moines, Iowa

Van Raalte, Peter Baird (U)
Pleasantville, N.Y.

Varughese, Sushil (U)
Waltham, Mass.

Vaughan, Terry R. (U)
Brooklyn, N.Y.

Ventre, Peter B. (J)
Methuen, Mass.

Vernon, Susan Elizabeth (U)
Topeka, Kan.

*Vickers, Holly Ann (U)
Prides Crossing, Mass.

Vincze, Stephan Leslie (U)
Melrose, Mass.

Vipond, David William (U)
Waverly, Pa.

w

Wagner, Craig Bryant (L)
Danville, Ill.

Wakefield, Anne (U)
San Francisco, Calif.

Waldner, Lars C. (J)
Downers Grove, Ill.

Walker, Todd F. (J)
Erie, Pa.

Walker, Wendy W. (L)
New York, N.Y.

Wall, Fred Kenneth (U)
Bronx, N.Y.

Wallace, Derrick Charles (U)
New York, N.Y.

Wang, James Kuo Chang, Jr. (J)
No. Scituate, R.I.

Washburn, Mary (U)
Andover, Mass.

Washington, Maria A. (L)
Oklahoma City, Okla.

Waterman, Dana Stephen (L)
Narragansett, R.I.

Watson, Linda Lu (L)
North Canton, Ohio

Watt, Andrew Somers (U)
Needham, Mass.

Weidenman, Lauren E. (U)
Muttontown/Syosset, N.Y.

Weill, Michael Andrew (U)
Seroe Colorado, Aruba
Netherlands Antilles

Welch, Philip M. (U)
Cambridge, Mass.

Wellin, Marjorie Sears
Greenwich, Conn.

*Wellman, Katharine F. (L)
Bangor, Maine

Wheeler, Paul Richard (J)
Chelsea, Mass.

Wheelwright, Andrew Clugh (U)
Cohasset, Mass.

White, Ann Rachel (L)
Andover, Mass.

White, Lyndon Franklin (U)
Chestnut Hill, Mass.

Whiteford, William B. (U)
Englewood, Colo.

Whittlesey, Jane Burr (U)
Pittsfield, Mass.

Wicker, Thomas G. (J)
Washington, D.C.

Wigglesworth, Henry C. (L)
New York, N.Y.





Wilburn, Richard Allan (L)
Chelsea, Mass.

Wiley, Cynthia J. (J)
Stockton, Ill.

Williams, Rachel M. (U)
Bronx, N.Y.

Wilson, Charles L., III (U)
Bloomfield, Mich.

Wilson, Steven Hoadly (J)
Wuoque, N.Y.

Winer, Robert Morris (U)
Waban, Mass.

Wise, Diana Doreen (L)
Madrid, Spain

Wise, John Gray (U)
Long Beach, Calif.

Wiseman, Anne Marie (J)
Andover, Mass.

Woerner, Scott W. (L)
Lake Forest, Ill.

Wolf, Elizabeth A. (U)
Elizabeth, N.J.

Wolf, Sylvia (U)
Gloucester, Mass.

Wong, William Bullitt (U)
New York, N.Y.

Woodman, Francesca S. (L)
Antella (Firenze) Italia

Woodward, Matilda R. (U)
Columbia, Mo.

Woodworth, Elizabeth (L)
Andover, Mass.

Worthington, Samuel A. (L)
Valais, Switzerland

Wright, Lorraine Renee (U)
Brooklyn, N.Y.





Wroble, Lori Ann (J)
So. Dartmouth, Mass.

*Wyman, Peter Hunt (U)
Katonah, N.Y.

Y

*Yameen, Pamela Ann (U)
Lawrence, Mass.

*Young, James Taylor (U)
Thornwood, N.Y.

Yu, Lloyd Michael (U)
Poughkeepsie, N.Y.

Yun, William Y. (J)
Havre de Grace, Md.

Z

Zech, James L. (U)
Darien, Conn.

Zen, Emile Saleh (J)
New York, N.Y.

Ziegler, Jessica M. (U)
New York, N.Y.

Zins, Andrew David (U)
Short Hills, N.J.

Zisk, Stephen Robert (L)
Lexington, Mass.

Zucker, Laurie Michele (L)
Andover, Mass.







statistical information

ENROLLMENT STATISTICS 1973-1974

Alabama	7
Arizona	3
California	29
Colorado	9
Connecticut	78
Delaware	1
District of Columbia	14
Florida	14
Georgia	4
Idaho	1
Illinois	27
Indiana	9
Iowa	3
Kansas	3
Kentucky	4
Louisiana	5
Maine	12
Maryland	14
Massachusetts	421
Michigan	7
Minnesota	12
Mississippi	3
Missouri	3
Nebraska	5
Nevada	1
New Hampshire	14
New Jersey	53
New Mexico	1
New York	199
North Carolina	27
North Dakota	1
Ohio	31
Oklahoma	4
Oregon	8
Pennsylvania	30
Rhode Island	12
South Carolina	3
South Dakota	1
Tennessee	4
Texas	15
Vermont	6
Virginia	8
Washington	2
West Virginia	5

Antilles	3
Bahrain	1
Bahamas	1
Belgium	1
Bermuda	3
Botswana	1
Canada	5
Cook Islands	2
France	1
Gambia	1
Germany	2
Guam	1
Haiti	1
Honduras	1
Hong Kong	3
Iran	2
Italy	1
Japan	3
Kenya	1
Malaysia	1
Morocco	1
Norway	3
Portugal	1
Puerto Rico	2
Saudi Arabia	2
South Africa	1
South Vietnam	1
Switzerland	3
Taiwan	1
Thailand	2
Venezuela	5
Virgin Islands	3
West Indies	5
Total Students	1178

	Total	Boys	Girls
Seniors	381	283	98
Uppers	366	252	114
Lowers	307	210	97
Juniors	124	87	37
Total Students	1178	832	346

Boarding Students	979
Day Students	199
Total Students	1178





College Counseling at Andover

The aim of college counseling at Andover is to help students make wise decisions for their post-secondary education. Understandably, graduates of the school are attracted to the best colleges in the country, and we are pleased that 55% of our graduates are accepted by their first choice. Some inevitably are disappointed, however. Because multiple applications are common and because we feel that students should investigate alternatives to the so-called "prestige" colleges, we encourage students to consider other choices that would serve their goals without sacrificing the quality of their education.

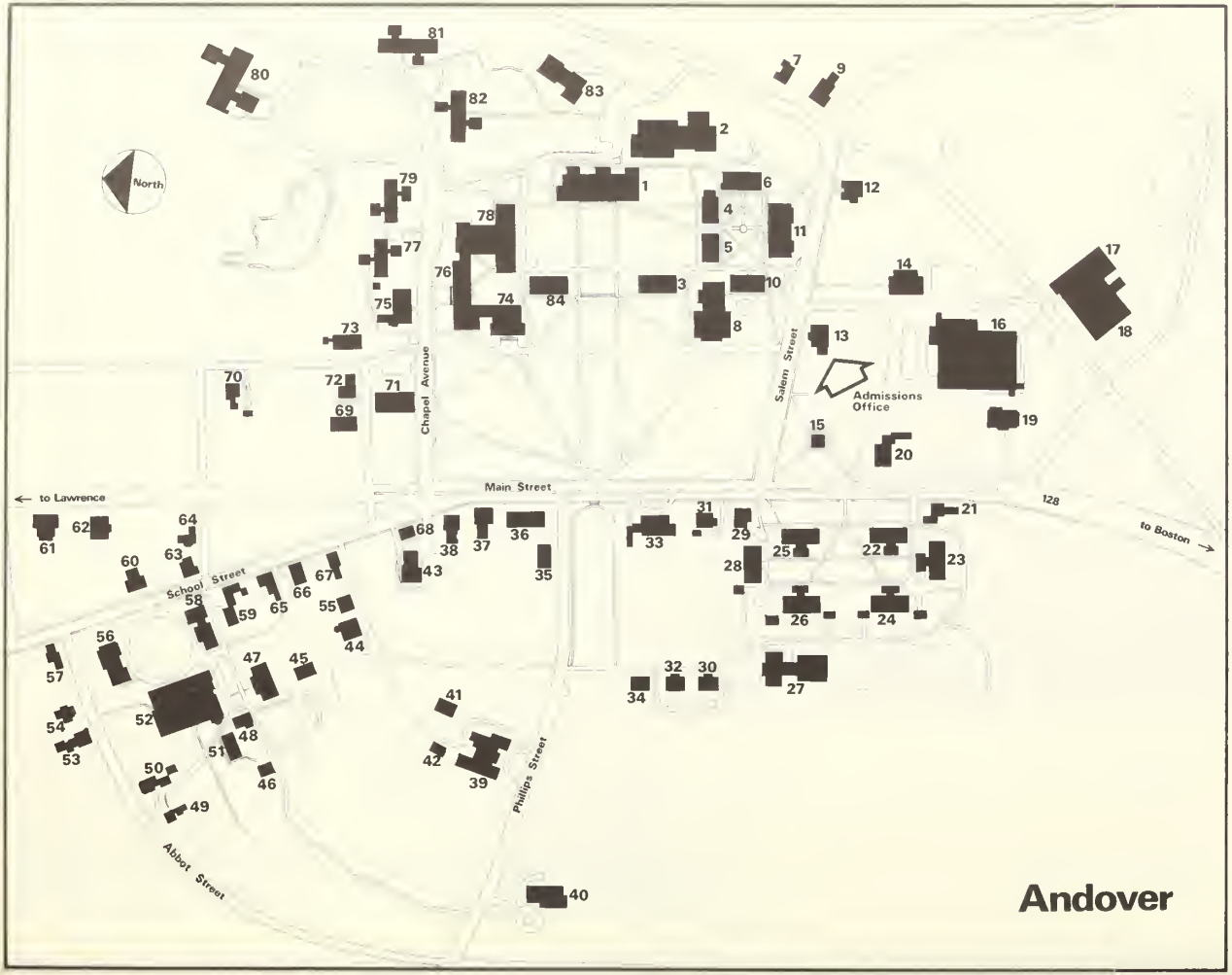
COLLEGE ADMISSIONS FOR THE CLASS OF 1974

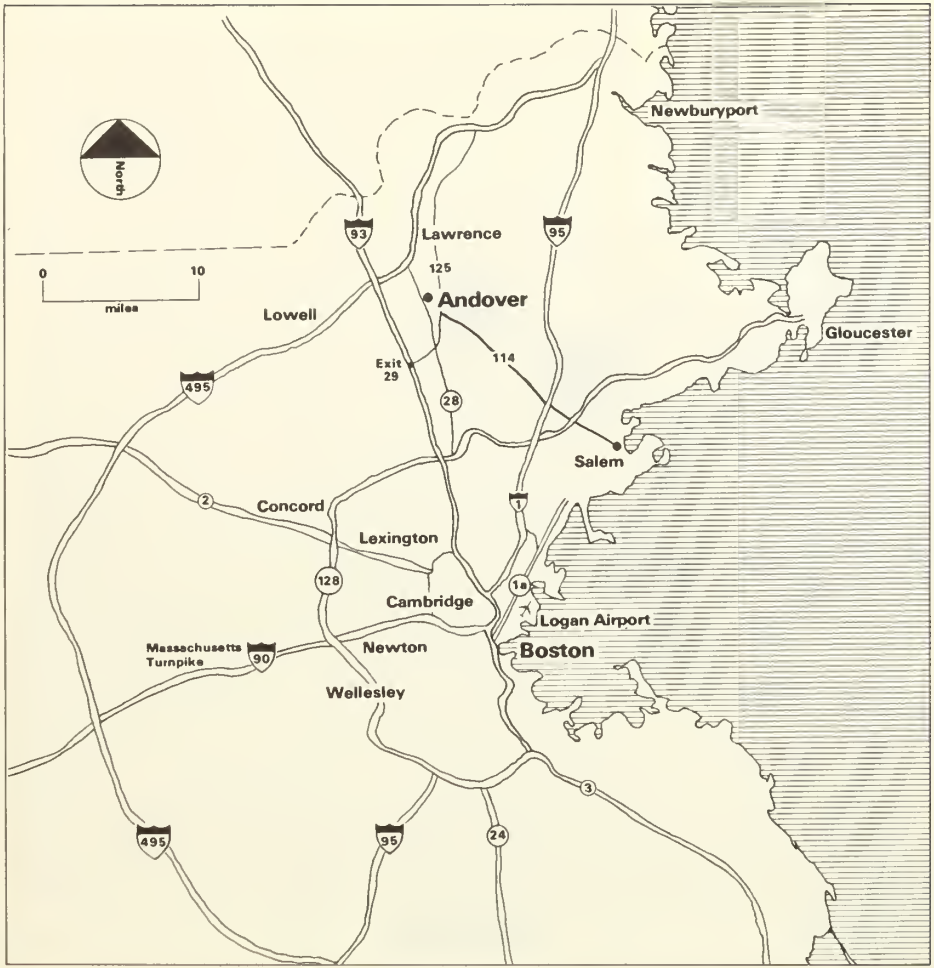
College	Admitted	Matriculating
Amherst	13	8
Col. of the Atlantic	1	1
Bard	2	1
Barnard	3	1
Beloit	4	1
Bennington	2	2
Boston Conservatory of Music	1	1
Boston College	11	4
Boston Univ.	13	2
Bowdoin	6	2
Brandeis	10	3
Brown	29	12
Bryn Mawr	3	1
Bucknell	4	1
Univ. of Calif. Berkeley	5	2
Santa Barbara	4	1
Santa Cruz	2	1
Carleton	14	2
Univ. of Chicago	2	1
Claremont Men's	4	2
Clark	6	1
Colby	13	2
Colgate	10	5
Colorado College	7	6
Univ. of Colo.	2	2
Columbia	14	1
Connecticut	10	2
Cornell	17	7
Dartmouth	27	17
Dickinson	7	1
Duke	14	7
Earlham	2	1
Eckerd	1	1
Univ. of Fla.	1	1
Franklin & Marshall	7	1
Georgetown	15	4
George Washington	7	2
Grinnell	3	2
Hamilton	1	1
Harvard	37	22
Haverford	3	2
Hobart	4	2
Ithaca	2	1
Johns Hopkins	18	4
Kirkland	3	1
Lafayette	5	2
Lawrence	4	2
Lehigh	7	1
McGill	3	2
Macalaster	3	2
Univ. of Maine	2	1
Univ. of Mass.	23	6
M.I.T.	11	7
Univ. of Miami	2	1
Univ. of Mich.	9	1
Middlebury	11	8
Mills	1	1
Univ. of Nebraska	1	1
New England College	1	1
Univ. Of N.H.	14	5
State Univ. of New York Stonybrook	3	1
Univ. of North Carolina Chapel Hill	8	5
Northeastern	4	1
Northwestern	34	6
Notre Dame	2	1
Oberlin	7	2
Occidental	11	2
Oxford Univ., England		
New College	1	1
Univ. of Penn.	49	19
Pine Manor	1	1
Princeton	21	7
Radcliffe	8	5
Rensselaer Polytechnic Inst.	9	2
Rice	4	3
Univ. of Rochester	12	6
St. Anslem's	1	1
Univ. of Santa Clara	1	1
Smith	6	4
Stanford	23	14
Swarthmore	3	2
Syracuse	4	1
Univ. of Texas	3	2
Trinity	13	5
Tufts	17	6
Tulane	6	2
Union	7	3
Vanderbilt	13	5
Vassar	12	3
Univ. of Vermont	10	4
Univ. of Va.	9	2
Wabash	4	3
Washington Univ.	2	1
Washington & Lee	4	4
Wellesley	3	1
Wesleyan	12	7
Wheelock	3	2
Williams	11	7
William & Mary	2	1
William Smith	9	2
Yale	38	15



INDEX TO BUILDINGS

51 Abbey House
58 Abbot Hall
38 Abbot House
22 Adams Hall
74 Addison Art Gallery
66 Alumni House
62 America House
34 Andover Cottage
75 Andover Inn
76 Arts Center
28 Bancroft Hall
3 Bartlett Hall
12 Benner House
25 Bishop Hall
16 Borden and Memorial Gymnasium
14 Bulfinch Hall
18 Case Memorial Cage
40 Chapin House
29 Churchill House
71 Cochran Chapel
11 Commons
19 Cooley House
61 Coy House
53 Cutler House
10 Day Hall
55 Draper Cottage
52 Draper Hall
32 Eaton Cottage
83 Eldridge Stuart House
68 Engineering Building
2 Evans Hall
59 Flagg House
84 Foxcroft Hall
72 French Hall
65 French House
7 Frost House
81 Fuess House
47 G.E. Abbot Gymnasium
78 George Washington Hall
69 Graham House
43 Graves Hall
70 Green House
48 Hall House
13 Hardy House **(Admissions Office)**
60 Homestead
27 Isham Infirmary
24 Johnson Hall
41 Junior House
46 Laundry
56 McKeen Building
45 Maintenance Shop
15 Memorial Bell Tower
4 Morse Hall
63 Morton House
80 Nathan Hale House
20 Newman House
64 Number 4 Morton Street
8 Oliver Wendell Holmes Library
37 Park House
6 Paul Revere Hall
35 Peabody House
5 Pearson Hall
31 Pease House
30 Pemberton Cottage
33 Phelps House
44 Power Plant
57 Principal's House
36 R.S. Peabody Foundation and Archaeological Museum
54 Ripley House
26 Rockwell Hall
67 Samaritan House
1 Samuel Phillips Hall
50 Sherman House
9 Smith House
77 Stearns House
79 Stevens House
82 Stimson House
42 Stott Cottage
73 Stowe House
21 Stuart House
17 Sumner Smith Memorial Hockey Rink
49 Sunset Lodge
23 Taylor Hall
39 Williams Hall


North
Admissions Office
Salem Street
Chapel Avenue
Main Street
to Lawrence
to Boston
128
School Street
Phillips Street
Abbot Street
Andover



Traveling to Andover

The Trombly Motor Coach Service runs buses to Andover from the Continental Trailways Bus Terminal, 10 Park Square, Boston. At the time this catalog went to press, busses ran every hour, 7:30 a.m.–11:00 p.m., Monday through Saturday, and from 11:00 a.m. to 5:00 p.m. on Sunday. Visitors should call the bus terminal in Boston, 482-6620, for up-to-date information.

If travelling by car from Boston, take Route 93 north for about 19 miles. Take Exit 29, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus.

If driving from Logan Airport, go through the Sumner Tunnel and follow Route 93 north signs.

Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
Telephone 475-5903

Sheraton Rolling Green Motor Inn
Lowell Street., Andover
Telephone 475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Rd.,
No. Andover
Telephone 688-1851



design: Designs & Devices, Inc.
Cambridge, Massachusetts

ase tear this preliminary application form along perforation
l mail with application fee in envelope provided. For complete
plication procedure, see Admissions section of this catalog.

PRELIMINARY APPLICATION

For entrance in September, 19___

Will you apply for financial aid?

Class applied for:

☐ Junior (9th grade)
☐ Lower Middle (10th grade)
☐ Upper Middle (11th grade)
☐ Senior (12th grade)
☐ Postgraduate

The required $10.00 application fee should accompany this form. Make checks payable to the Trustees of Phillips Academy.

Phillips Academy
Andover, Massachusetts 01810

Candidate's name _____
first middle last

Date of birth _____ ☐ male ☐ female Nickname _____

Name of parent or guardian _____

Permanent address _____
street city state zip

Mailing address _____
street city state zip

Other address _____
street city state zip

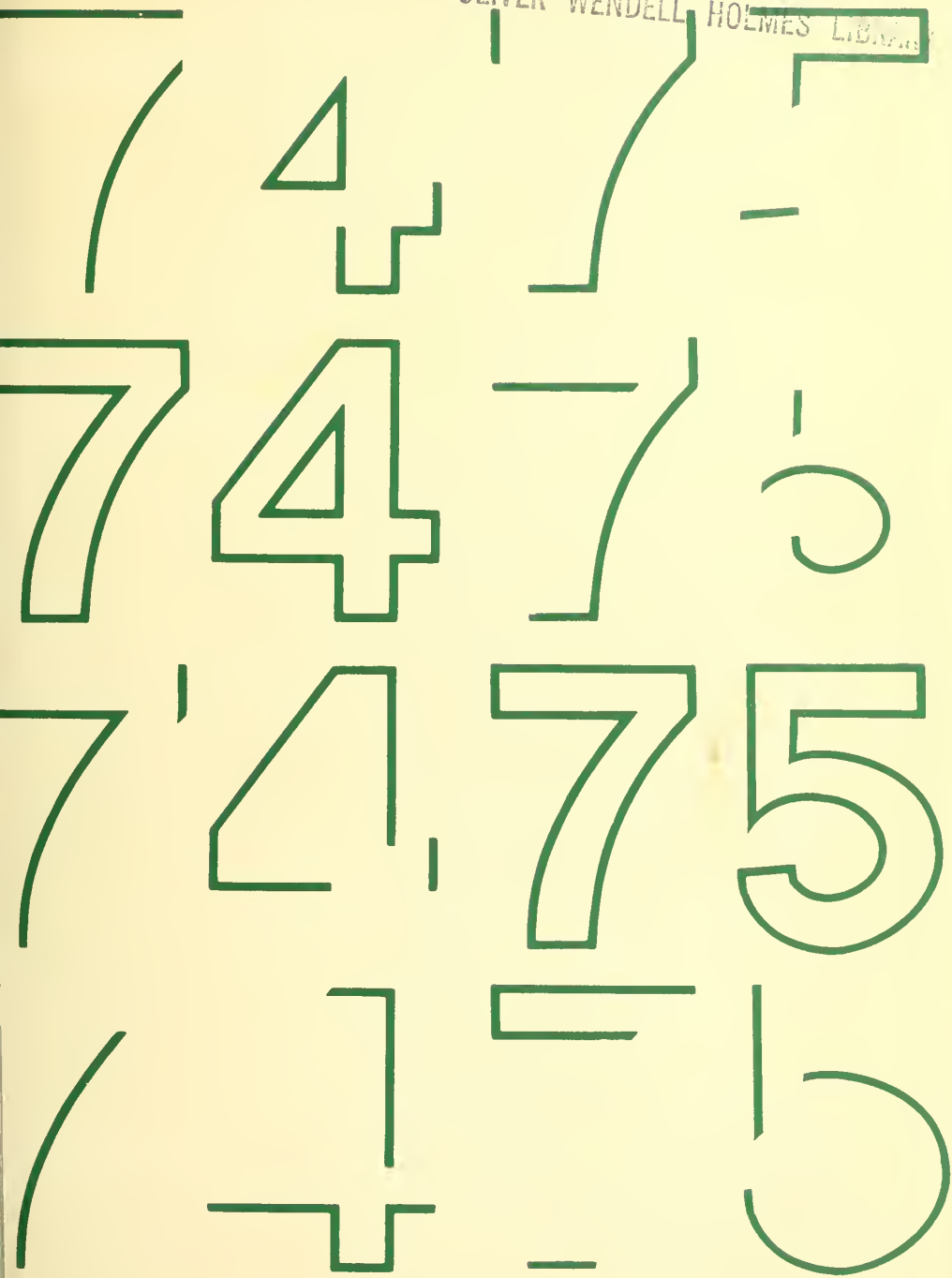
Telephone number _____

☐ Check if you have relatives now or previously at Andover.

Signed _____



OLIVER WENDELL HOLMES LIBRARY



Course of Study

1974-1975

Phillips Academy
Andover, Massachusetts

Course of Study

urse of Study

The curriculum of Phillips Academy combines a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level courses or other elective opportunities. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their attainment. Accelerated sequences and advanced courses offer particularly able and well prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class, if their deficiencies for full membership in it do not exceed a certain number of trimester courses, depending on the grade entered.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic requirements as well as with the possibilities of its flexible academic program. Members of the Upper Middle and Senior classes should take care to familiarize themselves with the entrance requirements of the colleges they may wish to enter.

The Trimester Plan
In order to make the program as flexible as possible, the academic year is divided into three equal trimesters. The purpose is to provide greater variety within the curriculum at all levels and opportunity for the substitution of independent work or off-campus projects for regular courses during the term. All departments offer year-long courses as well as term-contained courses, which are completed in one trimester. The diploma requirements are therefore stated in terms of full-year courses or trimester units.

Special Courses in Foreign Languages
Special courses covering the work of two years in one are open to qualified Juniors in Latin and to Seniors in German, French, Greek, Russian, Spanish, and Italian. These *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a *10-20* course as a diploma requirement.

Accelerated Sequences and Advanced Placement
The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin and the modern foreign languages, designed to cover four years' work in three or five years' work in four; and a two-year honors sequence in the physical sciences. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Andover students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Independent Projects for Seniors
With the approval of a faculty committee, a Senior may undertake independent work under the supervision of a member of the faculty in place of some portion of the course work normally required. Opportunities, which vary according to the extent to which a student has fulfilled diploma requirements, range from a project in place of a course in any or all terms to the substitution during either the winter or spring terms of an extensive project carried on during a term away from school or while a student remains at school to carry one or more necessary courses.

Off-Campus Programs and Projects
Off-campus programs are becoming increasingly important as schools recognize that many students wish to gain a practical understanding of the problems of contemporary life and to contribute as much as they are able to their solutions. Andover believes that well-conceived programs can demonstrate the need for knowledge and skills and stimulate the desire to learn. Where possible, it attempts to relate practical experience to the concerns of the classroom.
The Community Service Program, carried on in the nearby cities and towns of Lowell-Greater Lawrence area, has in recent years involved well over one hundred students from Phillips Academy in voluntary, free-time work in hospitals, schools, and youth guidance and recreation centers. See *Religion 50.*

The school also offers several off-campus residential programs. School Year Abroad, jointly sponsored by Andover, Exeter, and St. Paul's School, gives upper classmen the opportunity to study for a year in France, Germany, or Spain in a program managed by the sponsoring schools. The Washington Intern Program, in which Andover joins with Exeter, allows a group of Upper Middlers to spend the spring term living together in Washington and working in the offices of U.S. Senators and Congressmen. Drawing upon several years' experience with a summer residential work-study program in Boston's South End, the school now sends students of the *Man and Society* course to winter term work-study programs in Boston and Mexico. See *Social Science 41* and *42.*

In addition to school-sponsored group programs, the trimester plan provides opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the super-

vision of professionals outside the faculty. The school is prepared to make provision for students who can work out apprenticeships in schools, studios, laboratories, or research organizations in their home community or within reach of Andover. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements yet free a block of time during the appropriate term.

nning a Program of Studies at Andover

The following is designed to help parents of Andover students to understand both the theory and the practice of the Andover curriculum, and in particular to show the main decisions, and their consequences, which face the student and his Academic Advisor at each stage of the four-year program.

Main Features of the Curriculum
The curriculum of Phillips Academy combines a *required core* of studies that the school believes essential to a liberal education and *elective courses* designed to fit the special needs and interests of the individual student. Its aim is to provide both breadth and depth of experience at the secondary level.

Breadth
Breadth is secured by two somewhat different sets of disciplines. First are requirements leading to sound grounding in English, foreign language, and mathematics. Second are compulsory courses in such main areas of knowledge and experience as history, literature, laboratory science, and the arts.

Depth
Depth in particular fields is gained by choices of sequences which permit, in addition to English, four consecutive years of history or science or mathematics, or advanced study of foreign language, or religion and ethical thought, or the arts.

Flexibility
These possible sequences point to a third main feature of the curriculum—a flexibility sufficient for significant adaptation of the program to the individual student. It is chiefly this flexibility which necessitates careful study of the areas of choice at each stage.

Quality of work
All new students are advised to carry only a normal program. That is, in the Junior, Lower, and Upper Middle years, the normal program consists of five courses or the equivalent each term. The requirement for the Senior year is four major courses or the equivalent of the fourth major—that is, independent work equivalent to a major.

Academic Advising
Each student has an Academic Advisor who guides his program of studies throughout his Andover career. Within the diploma requirements, programs are determined by the student's long-range needs insofar as they can be foreseen. These needs include college and career plans, when known, scholastic aptitudes and weaknesses as revealed by

previous records and aptitude tests, and character and personality development. Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents wish to offer.

Diploma Requirements

The basic diploma requirements are the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover. This program includes nine trimester units of a foreign language, eight of mathematics, a full-year course in United States History plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of studio art, one trimester of music, and six trimesters of English including a two-trimester course of competence in writing and reading and a four-trimester sequence of general literature. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must take a trimester course in physical education in addition to required athletics. Entering Upper Middlers need take only one trimester of either studio art or music at the academy. Entering Seniors need not take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a *10-20* course in a foreign language. A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must pass all courses taken during their Spring trimester. Independent Projects are counted as graded courses.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, *the future consequences* of each course choice should be noted, for certain choices in one year open the way to later options and may close the door to others.

Junior Year

Each trimester a Junior must take five courses, one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many Juniors elect *Perception and Expression (English 10)* as one of their courses. In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—begin sequence (usually *11, 12, 13)* or placement by the department;
2. Language—begin sequence (usually a year-long course at the 10-level) or placement by the department;
3. Elective—Art, English, Social Science, History, another Math,
4. Elective—another language, Music, Performing Arts, Physical
5. Elective—Education, Psychology, Science.

Lower Middle Year

Each trimester a Lower Middler must take five courses, one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them

in the Spring. A few students take the CEEB Achievement Tests during their Lower Middle Year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

NEW STUDENTS

1. Math—enter the sequence by placement of the department (usually *20*);
2. Language—enter the sequence by placement of the department;
3. English—begin Competence (usually *Comp. (T2), Lit A);*
4. Elective—Art, Classics, Social Science, History, another Math,
5. Elective —another Language, Music, Performing Arts, Physical Education, Psychology, Religion, Science.

RETURNING STUDENTS

1. Math—continue the sequence (usually *24, 25, 26);*
2. Language—continue the sequence;
3. English—begin Competence (usually *Comp. (T2), Lit A);*
4. Elective—Art, Classics, Social Science, History, another Math,
5. Elective—another Language, Music, Performing Arts, Psychology, Religion, Science.

N.B.
If a student wishes to take *Social Science 41 (Man and Society: Urban Studies), Social Studies 42 (Man and Society: Revolutionary Mexico),* or to participate in the *Washington Internship Program,* he should make sure that he will have no year-long courses during his Upper Year. If a student wishes to participate in the *School Year Abroad Program* during his Upper Middle Year, he should discuss these plans with his Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year.

Upper Middle Year

Each trimester an Upper Middler must take five courses, one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall, all take the CEEB Scholastic Aptitude Tests in the Winter, and many take the CEEB Achievement Tests in the Spring of their Upper Middle Year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Most students satisfy their United States History requirement during their Upper Middle Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

NEW STUDENTS

1. Math—enter the sequence by placement of the department (usually *30* or *31);*
2. Language—enter the sequence by placement of the department;
3. English—begin Competence (usually *Comp. (T2), Lit A);*
4. Elective—Archaeology, Art, Classics, other English, Social
5. Elective—Science, History, another Math, another Language, Music, Performing Arts, Religion, Science, Science Honors.

RETURNING STUDENTS

1. Math—continue the sequence (usually *37, 38);*
2. Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2), Lit C);*
4. Elective—Archaeology, Art, Classics, other English, Social
5. Elective—Science, History, another Math, another Language, Music, Performing Arts, Religion, Science, Science Honors.

N.B.
If a student wishes to take an *Off-Campus Independent Project* for a trimester of his Senior Year, he must have no year-long courses during his Senior Year.

SENIOR YEAR
Each trimester a Senior must take at least four courses. A Pass/Fail course may be elected as a fifth course. A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses. Many Seniors re-take the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

NEW STUDENTS

1. Math—enter the sequence by placement of the department, if the requirement is not yet satisfied (usually *40);*
2. Language—enter the sequence by placement of the department, if the requirement is not yet satisfied;
3. English—begin Competence *(Comp. (T2), Lit A);*
4. Elective—Archaeology, Art, Classics, another English, Social
5. Elective—Science, History, another Math, another Language, a *10-20* Language, Music, Performing Arts, Psychology, Religion, Science, Science Honors.

RETURNING STUDENTS

Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Key to Course Designation
Courses listed as "0" are year-long courses, for example *French 31-0.* Courses listed as "123" are term-contained but sequential and may be taken separately or in sequence, for example *Art 21-123.* Courses listed as "1," "2," or "3" are term-contained and may be taken only once, for example *Art 10-1, Art 10-2, Art 10-3* indicates that the course is repeated. The designations of 1, 2, and 3 represent the trimesters in which the course is offered: 1 is Fall, 2 is Winter, and 3 is Spring. Some courses require a two-term commitment and are listed as T2, for example *Theatre 22-12 (T2)* is a two-term course offered in the Fall and Winter as a sequence with both terms required. Check carefully each listing for any other limitations such as prerequisites, permission of the instructor, etc.

urse Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25—1 **Archaeology**
25—2 Four prepared class hours per week. Open to Uppers and Seniors. Limit 20 students. Lecture and class discussion are supplemented by visual aides and work with archaeological specimens. The course will cover the prehistory of the Old World and New World from earliest times until the beginning of the first civilizations with a concentration on the areas in which these pristine civilizations developed. In the discussions of these preliterate culture sequences considerable emphasis shall be placed on archaeological technique, method and problems.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The courses in Art are planned to develop the visual perceptions of all students. The basic course, *Visual Studies,* is open to all and is a prerequisite to almost all electives in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the chairman of the department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography. This year a group of intermediate courses is being added to the program. Students will be asked to contribute to the cost of art materials.

Introductory Studio Courses

10—1 **Visual Studies**
10—2 Five class periods and three hours preparation. In its emphasis on observation,
10—3 interpretation, and organization, the basic course is designed to supply an understanding of contemporary surroundings. With the discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—123 **Introductory Ceramics**
Pass/Fail. Four unprepared classes per week. Limit of ten students. Basic techniques of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as the functional possibilities of clay. At least one raku firing each term, or a similar special project.

12—1 **Introductory Photography**
12—2 Prerequisite: *Visual Studies (Art 10).* The course covers fundamentals of black
12—3 and white photography. Technique and control are emphasized for clarity, but content is the first consideration, along with the development of a personal direction in the medium. This course is a prerequisite for all other still photography courses. The student is expected to provide his own camera.

13—123 Weaving
Pass. Fail. Four unprepared classes per week. Limit of fifteen students. Learn to create wall-hangings, tapestries, or sculptural forms by combining yarns of different textures and color, with or without found objects. Weaving on improvised looms, macramé, crocheting, knitting, netting, and warp-wrapping are taught. Emphasis is on using one or more of these techniques to create a design unique in concept, color, and texture.

Intermediate Studio Courses

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies (Art 10)* is a prerequisite for all intermediate courses.

20—123 Drawing
Prerequisite: *Visual Studies (Art 10).* A course designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media.

21—123 Animation
Prerequisite: *Visual Studies (Art 10).* An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. Given in collaboration with the Music Department, the course may interest either the art student who wishes to explore the visual possibilities of the medium or the music student who wishes to find a vehicle for his original composition. Two class meetings plus six hours preparation.

22—123 Video
Prerequisite: *Visual Studies (Art 10).* A term-contained course in black and white ½-inch video-tape. Students engage in individual projects of their own choosing, and in more elaborate group productions, such as "T.V. shows" of both narrative and documentary nature.

23—123 Two-Dimensional Design
Prerequisite: *Visual Studies (Art 10).* The course deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color—free studies and collages dealing with the structural and expressive nature of color; 2) drawing—exercises using pencil, pen and brush, figure and landscape drawing; and 3) figure-ground—expanding the structural and illusionary aspects of figure-ground and an end in itself and as a basis for graphic and advertising design.

24—123 Three-Dimensional Design
Prerequisite: *Visual Studies (Art 10).* Woodworking, welding, furniture design, toy-making, sculpture—all these activities share principles of design which can be more broadly applied to architecture, city and regional planning. The course introduces the wood and metal shops via a series of assigned and self-assigned projects ranging from furniture to sculpture.

25—123 Intermediate Ceramics
Prerequisite: *Visual Studies (Art 10). Introductory Ceramics (Art 11)* preferred but not required. The course stresses combining techniques and the development of basic skills toward new forms. Participation in glaze preparation and firings.

26—123 Intermediate Photography
Pass. Fail. Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Four unprepared hours per week, offering a student the chance to pursue a project of his own choice. The course should be taken with an instructor different from the one the student studied with in *Introductory Photography (Art 12).*

Advanced Studio Courses

Visual Studies (Art 10) is a prerequisite for all advanced courses.

300—123 Graphics and Photography
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Applying Photography to graphic design, particularly through photo-silkscreen. Individual experimentation is emphasized.

301—123 Studio Photography
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Limited to eight students. Portraiture and Fashion: controlled lighting with photo flood and studio strobes. Large format cameras (2¼ and 4 x 5) are supplied for this course. Meets Wednesdays from 1:30 to 5:30 for shootings; subjects may be professional models from Boston or subjects of the student's choice.

302—123 Painting
Prerequisite: *Visual Studies (Art 10).* An introduction to the basic concepts and techniques of painting in oil, acrylics, and watercolors. In preparation for the serious work of each student in that individual's selected field of interest, there are class discussions, demonstrations, and appropriately assigned problems in design. Each term there is at least one required museum or gallery trip. It is suggested that one or two of the intermediate courses—*Problems in Art History (Art History 27), Two Dimensional Design (Art 23),* or *Drawing (Art 20)*—are helpful prior to painting.

303—123 Filmmaking
Prerequisite: *Visual Studies (Art 10).* Students are encouraged to develop their own projects. Some students may choose to continue with work begun in *Animation (Art 21)* or *Video (Art 22)* (which are *not,* however, prerequisites for *Filmmaking).* Others develop documentary or narrative projects, or 'abstract' movies that are merely sequences of images. Cameras, editing equipment, etc., are provided by the school.

304—123 Advanced Ceramics
Prerequisite: *Visual Studies (Art 10).* For those who are seriously interested in the total operation from design to execution. Hand-building, wheel-throwing, glaze-making (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips.

305—123 Print Shop
Prerequisite: *Visual Studies (Art 10).* Fall: RELIEF PAINTING: designing, cutting, and printing linoleum and woodblocks in editions. Winter: SILK-SCREEN: making stencils for the screen, experimenting with color, and printing imaginative compositions as well as message-oriented posters. Spring: INTAGLIO: starting with drypoint and learning the processes of etching and printing in a workshop atmosphere.

306—12 Advanced Photography (T2) (a two-term commitment)
306—13 Prerequisite: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Students must enroll for the Fall Term and at least one other term. The course is designed to provide an opportunity to work intensively in photography for an entire year; it includes work on technique, photographic seeing, photographic history, and individual projects.

307—12 Documentary Photography (T2) (a two-term commitment)
307—13 Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Students must enroll for the Fall Term and at least one other term. While some advanced darkroom instruction is offered, the emphasis of this course is the "documentary style," i.e., photographing people and their environments. Methods for producing essays and picture stories are explored. The works of many photographers are viewed and discussed. Individual projects are encouraged, and assignments are given on request.

308—123 Sculpture
Prerequisite: *Visual Studies (Art 10).* Offers an opportunity to work in practically

every material available to the sculptor today, including wood, stone, metal, plastics, plaster, and others. It is therefore possible for the student to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from his own experience. Some outstanding work of recent classes include the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Addison Gallery, a standing steel figure by Jamie Morgan, '73, which was on display in the Headmaster's Office during this year, and others. Individual criticism is stressed.

309—123 **Kinetics**
Prerequisite: *Visual Studies (Art 10).* A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course.

310—123 **Architecture**
Prerequisite: *Visual Studies (Art 10).* A design course based on previous work on *Visual Studies (Art 10)* and/or *Three-Dimensional Design (Art 24)* which relates the basic elements of surface and volume to the construction of shelter, the efficient combination of human functions, and the organization of work. At least one term involves large-scale projects constructed in the woodworking shop. Examples from recent years include the Search and Rescue climbing tower near Rabbit Pond and the playground at a local nursery school.

311—123 **Contemporary Communications**
Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, nonfiction, poetry, drama, motion pictures, and the visual arts. Prerequisites: Successful completion of a course in art or music, and a concurrent commitment to an additional communicative endeavor in creative writing, in art, in music, in performing arts, or in some independent work in mathematics or physical science. Acceptance into the course is based on written application and personal interview. At least one term the course engages in a large group project aimed at public presentation. (Mr. Owen and Mr. Lloyd)

312—123 **Puppetry**
Prerequisite: *Visual Studies (Art 10).* Four prepared class periods. The course aims to expose students to various techniques of puppet construction which may then be tried out regularly before audiences in the Drama Lab, the Andover Public Schools, and the main stage. Fall Term is devoted to the more traditional forms: the hand puppet and the marionette. Winter Term features rod and shadow puppets, less familiar in the U.S., but excellent vehicles for real imagination. Spring Term involves experimentation with various forms, as well as creation of new forms.

Art History

Art 27—1, 27—2, 27—3 **Problems in Art History**
Prerequisite: *Visual Studies (Art 10).* This course is about the ideas—social, historical, aesthetic—that underlie the making of art. The goal is to provide a student with a working vocabulary with which to approach the visual arts. How does a painting reflect the ideas of its times? How does its particular medium affect its message? How does it fit into the Western tradition of images? How do its formal elements (line, plane, color) contribute to its meaning? What has the artist's place been in society? What motivates a man or woman to create images? How do we judge for ourselves what is "beautiful" or pleasing? What is "taste" and how does it change? This course is recommended as a precursor to *History 55, History 56* and *Art History 57.* Texts: Read, *Art and Society;* Zucker, *Styles in Painting;* Taylor, *Learning to Look;* and others.

History 55—1 **Art and Architecture Before the French Revolution**
Four prepared class periods. For Uppers and Seniors. Prerequisite: *Visual Studies (Art 10)* or permission of the instructor. This course is an introduction to the Western visual arts from the archaic sculpture of Greece to the late Baroque of the eighteenth century. Looking at major art historical epochs and problems, the

course focuses on the Renaissance and Baroque. It also includes occasional visits to the Museum of Fine Arts and the Gardner Museum in Boston.

History 56—1 56—2 **Art and Architecture Since the French Revolution**
Four prepared class periods. For Uppers and Seniors. Prerequisite: *Visual Studies (Art 10)* or permission of the instructor. This course discusses major movements in the visual arts since the late Baroque through examination and comparison of representative works. The course, after introducing the mechanics of formal analysis, considers the changes in the French, English, and American arts during the late eighteenth and early nineteenth centuries, the problem of academic intolerance, and the rise of Impressionism. Looking at the development of more contemporary schools, it examines the relationship between photography and earlier media, the experiments of Cubism and Expressionism, modern architecture, Surrealism, and the New York School. The course includes occasional trips to the Boston Museum of Fine Arts.

History 57—2 57—3 **Arts in America: Role of the Artist in American Society**
Prerequisite: *Visual Studies (Art 10).* Four prepared class periods. For Uppers and Seniors. Considering painters, architects, and sculptors, this course explores the relationship of artists to American society during five distinct periods: colonial, revolutionary, mid-19th century, the time of the Armory Show (1913) and the decade of the 1960's. The dual emphasis is on reading contemporaneous documents and on experiencing the works of art discussed. Several field trips complement the examination of works in the collection of the Addison Gallery of American Art. Recognizing that some art reflects personal vision rather than societal issues, the course includes study of such artists as Winslow Homer and Frank Lloyd Wright.

History 55, History 56, and Art History 57 when taken consecutively combine to form a full year's preparation for the Advanced Placement Examination in Art History.

The Classics

The foreign language diploma requirement is competence at the level of the third year. Such competence is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of eight, or even seven trimesters, by passing a special examination set by the department concerned.

The Department of Classics offers students through the study of the Greek and Latin languages a direct entry into Greek literature, which is still unsurpassed in quality, and into Latin, which as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western civilization.

Latin has traditionally been considered the first language of the two to be studied in school. Students, however, should be made aware that Greek, as a first language, is no more difficult than Latin. The Greek alphabet is easily mastered in the first two class meetings and students quickly discover that the language has a natural and at the same time very expressive quality that has made it a memorable study in many young lives from Cicero to Winston Churchill.

Greek Courses

10—0 **Greek**
Five prepared class periods. The course prepares students for the reading of Greek literature. The necessary training is given in basic vocabulary, forms, and syntax.

Frequent practice in sight reading and introduction into the bases of Greek civilization enhance the study of the first year of the language. Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Crosby and Schaeffer's *Introduction to Greek* (Allyn and Bacon) are used.

10-20—0 Greek
Five prepared class periods. The course is open to properly qualified Seniors. It covers in one year the essential material of *Greek 10* and *Greek 20*. The texts are Chase and Phillips' *A New Introduction to Greek*, (Harvard University Press), and Xenophon's *Anabasis*, ed. Mather and Hewitt, (University of Oklahoma Press).

13—1 Introduction to Greek
13—2 Four prepared class periods. The course gives an introduction to the language
13—3 and literature of Ancient Greece. It is a term-contained unit, but opportunities are available for those who wish to continue the study of Greek to do so.

20—0 Greek
Five prepared class periods. The second year is occupied with selections from Xenophon's works and with an easy dialogue of Plato. Prose composition in Attic Greek is studied, the grammar is reviewed, and there is much work in sight translation. The text is Xenophon's *Anabasis*, ed. Mather and Hewitt, (University of Oklahoma Press).

30—0 Greek
Four prepared class periods. The third year is spent mainly reading selected books of the *Iliad* and the *Odyssey*. After the dialect is mastered, more attention is given to the literary side of the poems and to the translation of Homer at sight. The texts are Benner's *Selections from Homer's Iliad* (Appleton) Homer's *Odyssey I-XII*, ed. Stanford (St. Martin's Press), and Euripides' *Alcestis*, ed. Hadley (Cambridge University Press).

33—1 Hellenistic Greek
33—2 Four prepared class periods. The course studies primarily the New Testament.
33—3 Selections from the Old Testament and other Hellenistic writings may be used. It is open to those who have completed *Greek 20*.

40—123 Greek
Four prepared class periods. The Fall Term is devoted to selections from Herodotus, Hippocrates, Thucydides, and Plato; the Winter Term to a play of Sophocles; the Spring Term to selections from the Greek lyric poets.

Latin Courses

10—0 Latin
Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms, and syntax of the language along with frequent practice in sight reading. The student is introduced to the general outline of Roman history and civilization and is directed to the enhancement of his English vocabulary through the study of Latin derivatives. The text is Chase's *A New Introduction to Latin*, (Independent School Press).

10-20—0 Latin
Five prepared class periods. Students who are not ready for *Latin 20* may be placed in *Latin 10-20* and thus given opportunity to complete two years of work in one. Those who pass the course successfully are given credit for two years of Latin. The course is reserved for students who give evidence of high ability. Texts are the same as those for *Latin 10* and *Latin 20*.

11—0 Latin
Five prepared class periods. The course begins after the middle of the Fall Term. Its content is the same as *Latin 10*, taught at a more gradual pace to allow time to resolve specific linguistic problems. Students who find unusual difficulty in mastering a modern foreign language are encouraged to discuss their eligibility for the course with their teacher, advisor, or with the chairman of the Department of

Classics. The text is Buehner and Ambrose's *Preparatory Latin,* (Independent School Press).

13—1 Introduction to Latin
13—2 Four prepared class periods. The course gives an introduction to the language
13—3 and literature of ancient Rome. It is a term-contained unit, but opportunities are available for those who wish to continue the study of Latin to do so.

20—0 Latin
Five prepared class periods. During the first term, the course gives a thorough review of the fundamentals of Latin grammar and begins the reading of Caesar. In the last two terms more Caesar is read, with additional selections from Eutropius, Nepos, Livy, and Erasmus. There is practice in sight translation and in prose composition. The texts are Chase's *A New Introduction to Latin* (Independent School Press), Buehner's *An Intermediate Latin Reader* (Independent School Press), and Colby's *Review Latin Grammar* (Independent School Press).

21—0 Latin
Five prepared class periods. Continues the work begun in *Latin 11.*

30—0 Latin
Four prepared class periods. The course has a three-fold purpose which it aims to fulfill through the writings of Cicero and a variety of other authors. Linguistically, it teaches students to read Latin prose with increasing ease. Historically, it presents a picture of Cicero's life and times and compares his period with our own. Culturally, it assesses the literary importance of Cicero as the creator of a prose style which influenced the literature of Europe for centuries. There is practice in sight translation. In the Spring Term selections from Vergil are read. The text is Gillingham and Barrett's *Latin: Our Living Heritage,* Book III (Charles E. Merrill Books). In the Winter Term students who wish may substitute *Latin 33* for the regular *Latin 30.*

31—0 Latin
Five prepared class periods. The course follows the same outline as *Latin 30.* It is open to students who have completed *Latin 21* and to students in their first year at Phillips Academy.

33—1 Latin
33—2 Four prepared class periods. The course is designed to meet the needs of students
33—3 who have completed *Latin 20* and do not wish to take a full year of Latin beyond that. The authors selected for a given term will be chosen to suit the tastes of those in the course. Ovid, Plautus, and a survey of medieval Latin literature are possibilities.

40—123 Latin
Four prepared class periods. Each term is the prerequisite for the term which follows it. By a study of selections from the *Aeneid* and from other Latin poetry, the course attempts to introduce students to both the forms and content of classical poetry and to make plain its influence upon the poetry of modern languages. The poems are studied as literature and not merely as exercises in translation.

43—1 Latin
43—2 Four prepared class periods. Like *Latin 33,* this course is designed for those who
43—3 have completed *Latin 30.* Among the authors possible in any given term are Livy, Catullus, and Horace.

50—123 Latin
Four prepared class periods, one unprepared period devoted to sight work. The course is open to students who have passed *Latin 40* or who otherwise satisfy the Chairman of the Department of their eligibility. It is the equivalent of a traditional freshman Latin course in most colleges. In the Fall Term, selections from Livy's *Histories* and Catullus' *Poems* are read. In the Winter two Roman comedies are read, and in the Spring, Horace's *Odes* and selections from Tacitus' *Annals.*

Classics Courses

11—2 **Etymology**
11—3 Four prepared class periods. For Juniors. A practical method of strengthening conversational, literary, and scientific vocabulary by the study of stems, prefixes, and suffixes in English words, especially as derived from Greek and Latin, increasing accuracy of definition and perception of nuances of meaning.

21—1 **Classical Civilization: Greece**
21—2 Four prepared class periods. A survey of Greek history, literature, and art de-
21—3 signed primarily for underclassmen. Texts are Starr, *The Ancient Greeks* (Oxford) and Kitto, *The Greeks* (Penguin).

22—1 **Classical Civilization: Rome**
22—2 Four prepared class periods. A survey of Roman history with supplementary ma-
22—3 terial from literature and art, primarily for underclassmen.

30—123 **Epic Poetry**
Four prepared class periods. The Fall Term is a prerequisite for the Winter or Spring Terms. The Fall Term may be taken as a term-contained course. If the student wishes to continue, he may choose either or both of the other two terms. The course is an investigation of the diverse and unique literary monuments produced by many cultures. The *Iliad* and the *Odyssey*, the *Aeneid*, *Gilgamesh*, *Song of Roland*, *Beowulf*, and Tolkein's *The Lord of the Rings* are read.

31—1 **Etymology**
31—2 Four prepared class periods. For Lower Middlers, Upper Middlers, and Seniors. Training in the interpretation of English words by systematic analysis of elements derived from Greek, Latin, and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding.

40—1 **Classical Influences on English Literature**
40—2 Four prepared class periods. Analysis is made of several important works of clas-
40—3 sical literature and their influence on important works of English literature. Among the writers studied are Ovid and Chaucer, Vergil and Milton, Horace and Pope, Homer and Joyce. No knowledge of Greek or Latin is required.

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course),* and to complete the *Literature Sequence* through *Literature C.* For those entering Seniors who must take the *Competence Course,* the requirement is reduced by the appropriate number of trimesters.

The English Department also offers courses at the following levels: *Perception and Expression,* for Juniors; *English as a Second Language,* for some foreign students; specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

Juniors
Students entering the Junior Class are strongly urged to take the normal Junior course *(Perception and Expression),* although they may elect to take no English at all, or they may apply to the Department Chairman to take the *Competence Course.* In general, Juniors are encouraged to postpone the intensive *Competence Course* until their Lower Middle year.

Lower Middlers and Upper Middlers
Entering Lower Middlers and Upper Middlers should take the *Competence Course.* They will be advanced to the *Literature Sequence* as soon as they establish competence.

Seniors
Entering Seniors take the *Competence Course* in the Fall Term. If an entering Senior is deemed competent early in the Fall Term, he may apply to the Department Chairman for permission to waive the literature requirement and enroll in one of the specialized courses.

Junior Year Courses

0—123 **Perception and Expression** (not to be confused with *Perception and Expression/Studio—English 11)*
This course, recommended for ninth graders, does not seek to prepare students for *Competence.* Rather, it involves the student in a number of experiences intended to increase his awareness of the world around him and of language, including the reading of fiction, drama, and poetry; recording impressions in a journal; listening to programmatic music; reading aloud and elementary acting; and the writing of original material.

1—123 **Perception and Expression/Studio**
This course, recommended for Juniors, has four prepared periods and one unprepared period. Taught jointly by members of the English and Art Departments, the course, like *Perception and Expression (English 10)* also seeks to involve the student in a number of experiences intended to increase awareness of the world around us. In addition to reading, writing, and listening, students work with tape recorder and video tape, still and motion camera, and acting, involving individual and group performances in various media. This course exempts students from the photography half of *Visual Studies (Art 10).*

3—123 **English as a Second Language**
The course acquaints the foreign student with the idiom and structure of English. This class is also open to upperclassmen.

Juniors are also eligible to enroll in Etymology, which is described under Classics 11.

Required Sequence Courses (2 years)

	Fall	Winter	Spring
First year of sequence	Competence (T2)		Lit A
Second year	Lit B (T2)		Lit C

Competence Course (T2) (a two-term commitment)
The course is designed to teach the basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. It encourages the acquisition of important reading skills in conjunction with the study of writing. Passages that have been

composed by skillful writers are evaluated for their particular strengths: organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas.

Literature Sequence
The texts listed comprise about half the reading in each course, the remaining texts to be chosen by the individual instructor of each section.

Lit A
A one-term introductory course to the *B* and *C* courses in which the student reads in depth poems and short stories of the Twentieth Century. Composition stresses the analysis of these poems and stories.

Core Texts: *Pocket Book of Modern Verse,* ed. Oscar Williams
50 Great Short Stories, ed. Crane (Bantam)

Lit B (T2)
A choice among three courses in English and American literature 1660-1900. Each course is a two-term unit given in the Fall and Winter Trimesters.

Lit B-1 (T2) (a two-term commitment)
The prose and poetry of the late Seventeenth and Eighteenth Centuries, with emphasis on satire.

Core Texts: *Fall Term*
Swift, *Gulliver's Travels*
Pope, selected poems

Winter Term
Fielding, *Joseph Andrews*
Blake, selected poems; or selections from *Eighteenth Century Minor Poets* (Dell Laurel Edn.)

Lit B-2 (T2) (a two-term commitment)
Romantic literature in England and the United States.

Core Texts: *Fall Term*
Keats
Bronte, *Wuthering Heights*

Winter Term
Whitman
Melville, *Moby Dick;* or Hawthorne's short stories

Lit B-3 (T2) (a two-term commitment)
English and American literature of the later Nineteenth Century.

Core Texts: *Fall Term*
Hardy, *Mayor of Casterbridge;* or Dickens, *Hard Times*
Browning

Winter Term
Twain, *Huckleberry Finn* or *Pudd'nhead Wilson*
Dickinson

Lit C
A choice among three courses centering on three plays of Shakespeare

and some related works. Each course is one trimester given in the Spring Term. Each section focuses on a theme chosen by the individual instructor.

Lit C-1: *Macbeth*

Lit C-2: *Hamlet*

Lit C-3: *Othello*

Reading Seminars

Class meetings and required preparation equivalent to a course load of four prepared class periods. Seminars are open to students who have fulfilled the Department's competence requirements. Seminars may be taken in addition to, but not in place of, *Literature Courses.* Choice of reading material, topics for weekly essays, and the style of classroom discussions will be largely up to the students. Qualified students conduct seminars in association with members of the Department. The following Reading Seminars are already scheduled for 1974-75:

11—123 **Literary Criticism**
(Mr. Foster)

12—123 **Living Writers**
(Mr. David Smith)

Public Speaking

43—1 **Public Speaking**
43—2 Four prepared class periods. An elective course for Seniors and for some speech
43—3 making. Impromptu and prepared speeches help the student to develop poise, fluency, and force. Reference text: Turner's *Voice and Speech in Theatre* (Sir Isaac Pitman & Sons, Ltd., London).

Specialized Courses

Specialized Courses are open to students who have successfully completed *Literature A, B,* and *C.* Specialized Courses are of three kinds: term-contained; two-term, sometimes with an option of a third term (T2); and full-year courses. If the full-year course is listed as *(123),* the student may enter or leave the course at the end of any term. Each course has four prepared class periods a week, unless specifically stated otherwise.

00—12 **James Joyce (T2)** (a two-term commitment)
A study of the developing technique and thought of Joyce in *Dubliners, A Portrait of the Artist as a Young Man,* and *Ulysses.* Ellman's *James Joyce* and *The Odyssey* are used as a background. Some of *Finnegan's Wake* is read aloud and puzzled over at the end of the course. Secondary sources are eschewed.
(Mr. Brown)

01—12 **Man and God**
The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include *The Oedipus Cycle,* Sophocles; *Hamlet,* Shakespeare; *Rosencrantz and Guildenstern Are Dead,* Stoppard; *Desire Under the Elms, Mourning Becomes Electra,* O'Neill; *J. B.,* MacLeish; *A Portrait of the Artist as a Young Man,* Joyce; *The Fixer,* Malamud; *The Idiot,* Dostoevski; *The Trial,* Kafka; *Tiny Alice,* Albee. (Miss St. Pierre)

502—3 Writers of the Fifties
The course is concerned with the writings of the post-war generation both in England and in America. Particular attention is given to the Beat Generation and the Angry Young Men: Kerouac, Ginsberg, Ferlinghetti, Osborne, Amis, Sillitoe. Those writers are considered not only as a literary movement, but also in comparison to other writers of the period, such as Williams, Miller, Bellow, Salinger, Styron, Capote, O'Connor. (Miss St. Pierre)

503—12 Comparative Humanities (T2) (a two-term commitment)
The course investigates certain important ways in which literature may be compared to the other major art forms: music, painting, photography, film, and sculpture. The Fall Term focuses on similarities in mood, technique, purpose, philosophy, organization and imagination. Pairs of artists and writers are studied: Hemingway and Mondrian, Thurber and Klee. Then the short stories of Faulkner are read in relation to several painters and photographers, and the Surrealist and Dada painters are compared to various writers. In the Winter Term a wide variety of analogies and contrasts are considered, as between written drama and performance, poetry and music, and words and photographs. Special emphasis is placed on the quality of "greatness" in various art forms, using specific works of Greek drama, Shakespeare, Michelangelo, Picasso, Beethoven, and Mozart. (Mr. Leavitt)

504—1 Portrait of the Artist
A study of the sensitive human being forced to make some adjustment to an often insensitive world. What are the varieties of adjustment, or lack of it? Representative texts: *A Portrait of the Artist,* Joyce; *Cat and Mouse,* Grass; *Steppenwolf,* Hesse; *The Caucasian Chalk Circle,* Brecht; *Henderson, The Rain King,* Bellow. (Mrs. Bugbee)

505—23 Irish Studies (T2) (a two-term commitment)
First a look at the history and folklore of Ireland and then an attempt to trace its influence on Irish writers from Yeats to Beckett. Representative authors: Yeats, Joyce, Synge, O'Casey, Beckett; *The Concise Course of Irish History,* Moody. (Mrs. Bugbee)

506—1 Poetry for Pleasure
For students who enjoy, or think they might learn to enjoy, modern poetry. The class explores ways in which poetry has changed during the 20th century and ways by which modern poetry may be helpful in increasing one's understanding and enjoyment of life in the 70's. (Mr. Dodge)

The following courses, Theatre 28 and English 508, are intended to be taken in sequence.

Theatre 28—1 Drama, as Theatre and as Literature
The Fall Term centers on the theatrical expression of drama. Students study archetypal plays and their manifestations in the theatre: as drama, opera, and adaptation. Among the works studied—*Antigone* of Sophocles; the opera *Antigonae* of Carl Orff; and Anouilh's *Antigone;* the *Macbeth* of Shakespeare, Verdi, and Ionesco, as well as *MacBird.* Similar studies of *Billy Budd, Faustus,* historical drama, and commedia dell 'arte. (Dr. Goodyear)

508—23 Drama, as Theatre and as Literature
In the Winter and Spring Terms, the student reads contemporary drama in order to determine how the theatre of the 60's and 70's reflects literary tradition while creating its own contemporary theatrical idiom. Emphasis upon British and American drama. (Dr. Goodyear)

509—123 Shakespeare: The Man, The Times, The Theater, The Plays
Each term a cycle of related plays is read, with biographical and historical material. During the course of the year, the class reads representative tragedies, histories, and comedies. (Mr. Marx)

510—123 College English Skills
The purpose of the course is to strengthen the student's ability in reading, writing, and speaking at the college level. Fall Term: Developmental Reading for

increased speed and comprehension, using the Harvard Reading Course with supporting exercises in writing. Winter Term: Spelling, vocabulary, punctuation, usage, grammar, and sentence structure. Frequent practice in writing the expository paragraph. Spring Term: The study and practice of the principles of expository writing and speaking: essay, the term paper, speaking in public.

511—123 **Writers in Depth**
A seminar course in which are studied the major works of an author, along with biographical and critical material. Authors chosen by the class and by the instructor have included O'Neill, Faulkner, Albee, Yeats, and Bellow. (Mr. Price)

512—123 **Satire and Comedy**
Fall Term: *Ancient and Renaissance.* From Horace and Juvenal to Jonson and Moliere. Winter Term: *Eighteenth Century.* From Dryden and Pope to Hogarth and Sterne. Spring Term: *Nineteenth and Twentieth Centuries.* (Mr. Regan)

513—123 **Novel and Drama Seminar**
Four prepared class periods. Most of the course is concerned with the major works of modern literature, principally the works of James, Faulkner, Grass, Barth, Nabokov, Borges, O'Neill, Eliot, Brecht, Kopit, Williams, Storey, and Pinter. The student has the opportunity to study the "world" of each writer and to compare it with that of the others. In order that he may have a basis of comparison with the writers of the past, he also studies *The Brothers Karamazov* and *King Lear.* Class periods are devoted to seminar discussions, exercises in logic and argument, dramatic readings, drama games, and critiques of student analytical and creative work. (Mr. Wise)

514—123 **Creative Writing**
The purposes of the course are to encourage each student to experiment with a variety of styles and forms and to give him the maximum support and constructive criticism as he works intensively on well-thought-out projects of his own choosing. The Fall Term and part of the Winter Term are devoted to reading and writing in such genres as the short story, lyric and narrative poetry, one-act play, humorous essay, parody, and book or film review. During approximately the latter half of the year each student may work in whatever form or forms particularly interest him. Student writing is frequently read in class, and a willingness to give and accept gracious yet serious criticism is essential. (Mr. David Smith)

515—123 **American Negro Writers 1890—Present** *(Also, see Theatre 26 for a course in Playwriting).*
The chief concern of this course is the black writer's conception of America and of his and his race's role in it. The conception is studied in writers from Dunbar to Kelley. While Dunbar's *The Uncalled* and Kelley's *dem* serve as book ends for the course, the poets, novelists and essayists of the Harlem Renaissance provide the major focal point. The method of this course is at once thematic and chronological: the pre-Renaissance tension between Dubois and Washington and the post-Renaissance emergence of such great writers as Wright, Ellison, and Baldwin are studied in depth. Attention is also given to portrayals of Blacks by white American writers. Crane's "The Monster" and Stein's "Melantha" are studied because they treat "black themes" in a way that is parallel to what black writers were doing with the same themes during the Harlem Renaissance and later. (Mr. Sykes)

517—123 **American Writers of the Twentieth Century**
Four prepared class periods. A study of the novel and the drama in America during the period 1900 to 1939. Representative authors are Wilder, Anderson, Wolfe, Fitzgerald, Cummings, Dos Passos, Steinbeck, Faulkner, Agee, Styron, West. (Dr. Goodyear)

520—123 **A Sequence in Film Study**
Although the following term-contained courses may be taken singly, they are probably most effective as a sequence.
Fall. THE WESTERN. Not a survey, but an investigation of some themes and styles in the Western. The emphasis of the course is on the films themselves, primarily those of Ford, Hawks, and Mann, with readings in the criticism of Sarris and

Bazin. Students are encouraged to compare the growth and decline of the Western to that of the Elizabethan and Jacobean Revenge Drama, or to another similar genre.
Winter. THE DETECTIVE MOVIE. The films are largely those of Hawks, Lang, and Hitchcock. The critical emphasis is the same as that of the Fall Term, but students who are continuing in the course do so in the context of two broad questions: (1) How does a director have to modify his style in a new genre? (2) Is either the detective or the gangster an urban cowboy?
Spring. THE MOVIE WITHOUT VIOLENCE. What are the alternatives to violence in an "action medium"? A look into documentary, abstraction, musical comedy, etc. (Mr. Marx)

523—1 **Nathaniel Hawthorne: Male-Female Relationships.**
Few men have been so sensitive to the necessity of restructuring the male-female relationship on the basis of "mutual happiness" as Hawthorne was. Nevertheless, he discovered philosophic and pragmatic stumbling blocks to this mutuality in both his life and books. Using both biographical and literary material, the course concurrently deals with the complexities of male-female relationships and great literary works. (Dr. Irish)

524—2 **In Search of the Autocrat**
This course emphasizes skills and methods of literary research. The major part of the course consists of original research on letters and manuscripts of Dr. Oliver Wendell Holmes, the nineteenth-century poet and essayist who attended Phillips Academy and willed significant documents and books to the Academy library. In preparation for this project the class studies methods of research and read works by and about Holmes, the Autocrat of the Breakfast Table. (Dr. Irish)

525—3 **Utopian Literature**
Since Plato, western men have constructed imaginary societies which present concepts of the world as it should be, not as it is. Beginning with Plato's *Republic,* the course surveys major utopian works which include *Gulliver's Travels, Looking Backward,* and *Brave New World.* As a final project, each student designs his own utopia. (Dr. Irish)

526—1 **Expository Writing**
526—2 This one-term course is designed to help students achieve facility in writing
526—3 expository prose and graceful, individual style. Students write short essays for each class, beginning with exercises in various patterns of development and progressing to more complex forms to fit student-chosen topics. Class meetings consist of group and individual analysis of student essays, and of discussion of short pieces by modern prose masters like E. B. White and John Updike. (Mr. Kalkstein)

527—3 **Chaucer and His Age**
The wit, poetry, and genius of the later Middle Ages and Renaissance, as seen in Chaucer and medieval drama. (Mr. Regan)

Courses related to English (like Contemporary Communications) may be found under Interdisciplinary Courses.

History and the Social Sciences

The diploma requirement for history is successful completion of *United States History (History 35)* plus one trimester elective taken in the Upper or Senior Year.

The introductory courses in the social sciences deal with man in various environments—geographical, economic, social, and political. They aim to offer Juniors and Lower Middlers opportunities to study and evaluate basic social science concepts. A course in biography centers on the con-

tributions of outstanding men. The approach is topical; the method depends on the substance and the skills at hand.

The courses in history are offered to Upper Middlers and Seniors. They are based on the conviction that a knowledge of the past is essential if an individual is to function effectively as a citizen in a modern democracy. Again, the approach is topical; the traditional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review.

Multi-disciplinary courses in the social sciences are also available for Upper Middlers and Seniors who wish to study particular societies of the twentieth century and who wish to have a work-study off-campus learning experience.

The essential purpose of all courses is to give the students training in the understanding of domestic and international problems that will serve them well as citizens. It is also hoped that for some students the courses may kindle an interest in the study of human society, past and present, that can be a source of pleasure and profit all their lives.

Introductory Courses in the Social Sciences
Social Science 10, 11, 12, 13, 14, 15, and 16
One-term courses. Four prepared class periods. For Juniors and Lower Middlers. These courses deal with man's geographical, economic, social, and political environments. Course materials include a variety of readings, films, slides, graphic and pictoral displays and maps. Among these are notetaking, outlining, essay writing, map and graph making, slide-taping, socratic exchange, informal debate, and group discussion. These courses emphasize those basic skills that enable students to make logical definitions, accurate analyses and summaries, relevant generalizations, and valid conclusions from marshalled arguments.

10—1 **Human Geography**
10—2 It has been said that the proper study of mankind is man, but it is also true that to
10—3 understand properly the place of man on the earth it is necessary to know something of our surroundings. This course concerns itself with the principles of human geography or the interrelationship between man and his natural environment. The organization of the course is topical; after an initial examination of the basic physical characteristics of the planet we live on, certain issues are examined in greater detail. Among these are the use and misuse of natural resources, the population problem, the crisis of the cities. Various associated topics, such as exploration, cartography and map reading are also considered. Other resources include a variety of books, periodicals, maps, films, and slide tapes. There are a number of individual and group projects during the term.

11—1 **The Social Environment of Man's Belief**
11—2 Magic, religion and science are three means by which man has defined his place
11—3 in the world. Men combine personal observation with societal assumptions about the world to arrive at a system of belief. This course is concerned with the social composition of groups of believers. It does not concentrate on the doctrine proclaimed by a group, but on the way such groups are formed, how they prosper, and the forces which threaten their social coherence. The following kinds of top-

ics are studied from an historical perspective: astrology, witchcraft, religious revivalism, utopian communities, the development of scientific method, and the "conflict" of science and religion. Particular emphasis is given to current manifestations of these systems of belief in industrial societies.

12—1 **An Introduction to Government and Politics: A Study of State and Local Government**
12—2 Man is a political being and the political environments closest to him, although
12—3 the ones he may be least aware of, are those of his own community and state. Many people know that there is some kind of local government but few know how the officials are chosen and what they do after they are chosen. Everyone knows they must pay many kinds of taxes but few know how tax money is spent in the community. There is clearly some kind of relationship between the town and the state but the nature of the relationship may not be clear to very many. This course focuses on the governments closest to us, the ones that all of us have to deal with in some way at some time.

13—1 **The Development of the Modern Economy**
13—2 After a brief introduction to the development of the contemporary problems of
13—3 industrialization, sources of energy, and population, this basic course in economics examines the American economy since 1929. It looks closely at the relationship between government policies and business, poverty and distribution of income, and growth and the environment.

14—1 **Socialism in China**
14—2 Did Mao Tse-tung's regime in China just "happen"? What are the traditions
14—3 within Chinese thought and behavior which would support or undermine the present regime? Students in the course investigate Confucianism, Taoism and Legalism and other widespread philosophies and read works of literature and history to try to determine the experiences and values of ordinary men. The course goes on to a careful look at modern times to see how the present reorganization of Chinese life is a curious belnd of the new and the old.

15—12 **The Emergence of Man (T2)** (a two-term commitment)
15—23 Using an anthropological approach, this course concerns itself with the development of the human species and of human society. After an introductory study of two contemporary hunting and gathering societies, the course focuses on the origins of humanness, tracing man's biological and cultural development during the Pleistocene Age. With the arrival of modern man, students then consider the emergence of complex societies, using evidence from Jarmo to explore the implications of the Neolithic Revolution, and from Sumer to study the advent of civilization. A wide variety of materials are used: readings (including materials published by the American Anthropological Association), films and filmstrips, fossil casts, and artifacts. In addition, considerable use is made of the resources of the Peabody Museum of Archaeology.

16—1 **A World of Nation States**
16—2 The course is a study of modern governments and international relations, show-
16—3 ing how the world's leading nations are governed and how they, in turn, dominate in the power structure of the world. The approach is descriptive, analytical, and comparative, covering the outstanding democratic and authoritarian types of government. Parliamentary and federal systems are compared with communist and fascist forms. Special emphasis is placed on the concept of sovereignty—where it lies, who exercises it, and how it is the key to understanding international relations. Both the national and international processes are examined with respect to form and function, theory and practice. In plainest terms, the course deals with the questions of how man organizes sovereign nations and how these sovereign powers, in turn, relate to each other in a world of nation states.

401—0 **Man and Society: Urban Studies**
For Upper Middlers and Seniors. Prerequisite: Permission of the instructor; Washington Interns are not eligible. A multi-disciplinary course in the social sciences that focuses on the post-World War Two American city. Fall Term. Four prepared class periods. During this term the class studies five topics: (1) the relationships among racial, religious and ethnic groups, (2) power, leadership and decision making, (3) poverty, its physical and cultural manifestations,

(4) urban education, and (5) the individual and community organization. Between Thanksgiving and Christmas the students live in isolation from the Phillips Academy community and work on three objectives: (1) self understanding and awareness of others; (2) community, personal, and group relations; (3) individual and group challenges in an Outward Bound type of experience. For the remainder of the Winter Term students live at the South End House in Boston and work in internships in public and private community and city-wide agencies. The work job is the key part of his Winter Term. In the winter the students develop with the instructor's guidance, individual goals and criteria to measure the success in achievement of these goals. Readings, weekly discussion groups, and community involvement grow out of the job experience and life in the South End. Each student keeps a journal during the Log Cabin and Boston parts of the course. The Spring Term opens with a week's evaluation by each student of his winter's experience. Then each student does a tutorial project on a question which he has formulated as a result of the Fall Term's classroom study or the Winter Term's job experience.

402—0 Man and Society: Revolutionary Mexico
Four prepared class periods. For Upper Middlers and Seniors. Prerequisite: Permission of the instructor; Washington interns are not eligible. A multi-disciplinary course in the social sciences which focuses on Twentieth Century Mexico. In the Fall Term four topics are studied: (1) relationships of differing culture groups; (2) persistence of poverty; (3) violence and social change in a continuing revolution; (4) organization and articulation of power groups in the process of decision making. After a two-week intensive orientation on present-day Mexico, the students use the remainder of the Winter Term in a work-study experience in Leon, Mexico, where they live with Mexican families and work under the direction of Mr. R. P. Merrill, a director of Instituto "IMLE." The Spring Term is devoted to tutorial studies of topics selected by students as a result of interests stimulated by the work of the Fall or Winter Term. Depending upon its nature, the successful completion of this study is regarded as a term's work in either the History and Social Science or the Spanish Department.

403—23 Education and Inequality (T2) (a two-term commitment)
Two classes and two seminar periods each week. Open to Upper Middlers and Seniors who have taken or are taking *History 35*. All enrollees must plan to take the Lawrence Fieldwork sports alternative during either the Winter or Spring Term of this course. (See note below.)
Public education has promised much. What can it really deliver? "The future of our cities will be largely what education makes it," wrote John Philbrick in 1885. And the U.S. Supreme Court said in 1954, "Today, education is perhaps the most important function of state and local governments. It is the very foundation of good citizenship." This course is a study of the tension between American education ideals and the realities of children's lives, both in school and out.

In the 1970's, much research suggests that our education system is failing to live up to its promise, especially for poor children. Yet a few teachers and a few schools do appear to greatly increase children's chance of "success." How do children learn? In what ways are they affected by their family and school environments, and by the culture of city or suburb? Beginning with a historical study of family life in an industrial city (Lawrence, Mass.), the course draws on students' field experiences as tutors in both Lawrence and Andover schools to answer these questions. We look at the cultural background of immigrant children, enter in our own way the current controversy over the origins and development of intelligence, evaluate some working models of radical reform—and try to improve on these according to the concepts of good education we have jointly developed within the course. Readings include Donald Cole's *Immigrant City;* David Landy, *Tropical Childhood, Cultural Transmission and Learning in a Puerto Rican Village;* Hermstein, *IQ;* Freud, *Civilization and its Discontents;* and Dennison, *The Lives of Children.*

NOTE: The Lawrence Fieldwork sports alternative brings students to schools in Lawrence two afternoons a week for a total of six hours work as teacher aides or

tutors. Students may work either with elementary age children in need of individual attention, or with black and Puerto Rican children at the junior high level. Final arrangements depend on the interests of students who sign up for the course, and on the needs of Lawrence school-children.

HISTORY COURSES

20—1 Leaders of the Western World: The American Scene
20—2 Four prepared class periods. For Lower Middlers. As a comparative study of
20—3 American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies of men and women from the days of John Winthrop and Anne Hutchinson to those of Martin Luther King. Representative paperbacks used are: Samuel Eliot Morison, *Builders of the Bay Colony;* Francis Parkman, *La Salle and the Discovery of the Great West;* Edmund Morgan, *The Puritan Dilemma; The Story of John Winthrop;* Richard Hofstadter, *American Political Tradition;* and Thomas T. Lyons, *Black Leadership in American History.*

21—123 Leaders and Issues of the Western World: The European Scene
Four prepared class periods. Open to Lower Middlers. A full-year sequence but may be elected on a term basis. The course covers roughly the medieval to early modern period of European history and the personalities and ideas that influenced it. An attempt is made to recreate the climate of former ages by including not only historical facts but the ideas and movements which changed civilization through literature, art, and the interplay of political, religious and social forces. Course material includes biographies, plays, or studies in social history and some reading of original texts. Representative titles of paperbacks used are *Medieval People,* by Eileen Power, *Saint Joan* by G. B. Shaw, the *Agony and the Ecstasy* by I. Stone, R. Bainton's *Martin Luther,* Mattingly's *The Armada* and *The Splendid Century* by W. H. Lewis. The Fall Term covers roughly the period up to the early Renaissance; Winter Term, Renaissance and Reformation; Spring Term, the religious wars, the development of national states, and the struggle between Absolutism and Constitutional Government.

22—3 Asian Biography
Four prepared class periods. For Lower Middlers. This course carefully considers the lives of important Asian men and women with an emphasis on what they were like as individuals, what their contribution was, and how they were influenced by their times. Persons to be studied may include Confucius, Pan Chao, Genghis Kahn, the Empress Dowager Tz'u Hsi, Mao Tse-tung in China, Sakamoto Ryoma in Japan, and Gandhi in India.

35—0 The United States
Four prepared class periods. For Upper Middlers and Seniors, though normally taken in the Upper Middle year. This course, together with an additional term course to be elected from among the *40* or *50* level history and social science courses, fulfills the diploma requirement in history. *History 35* is based on a series of paperbacks, original documents, and other readings that provide material for a survey of the history of the United States from the period before the Revolution to the present. Early topics stressed are the American Revolution, the establishment of the Federal Union, the age of Andrew Jackson, and the Civil War and Reconstruction. The emphasis then shifts to the industrialization of the United States, the problems that industrialization produced, and the attempts of the American people to deal with these problems. Finally, the course deals with the emergence of the United States as a world power, its part in two world wars, and the problems that it faces today. At the start of the course, emphasis is placed on such skills as close reading, note taking, and the writing of essay questions. Later on the student is introduced to different kinds of historical material, with more

emphasis on discussion. In the Spring Term the writing of a research paper represents a major part of the work.

Representative titles are Edmund Morgan's *Birth of the Republic,* two volumes in Macmillan's *New Perspectives in American History* series, two volumes in the American History Series edited by Carl N. Degler and David M. Potter, two volumes in the Wiley American Republic Series, and William E. Leuchtenburg's *The Perils of Prosperity.*

Candidates for the Washington Intern Program are selected from students taking this course as Upper Middlers.

41—123 East Asia in Revolution

Four prepared class periods. For Upper Middlers and Seniors. "Revolution" has become cheap currency, but there is really little else that can appropriately characterize the movement of Chinese and Japanese histories over the past century. The course is thought of as a year-long course, but it is offered in three term-contained units as follows: Fall: THE TRADITIONAL EAST ASIAN SETTING; Winter: THE IMPACT OF THE WEST; Spring: THE EAST ASIAN RESPONSE.

To begin to understand the dynamics of contemporary East Asia, an attempt must first be made to comprehend the East Asian tradition. For this purpose, the Fall Term's work includes readings from E. O. Reischauer and J. Fairbank, *East Asia: The Great Tradition;* C. P. Fitzgerald, *A Concise History of East Asia;* H. G. Creel, *Chinese Thought from Confucius to Mao Tse-tung;* E. O. Reischauer, *Japan, The Story of a Nation;* J. Fairbank, *The United States and China;* and Allie M. Frazier (ed.), *Chinese and Japanese Religions.* The Winter and Spring Terms include readings from Teng and Fairbank, Michael and Taylor, Mary C. Wright, O. E. Clubb, H. Borton, R. K. Hall, A. D. Barnett, R. North, S. Schram, and E. Snow.

The course consists of readings (as noted above), lectures, audiovisual materials, map exercises, and work projects. In short, the overall effort is to introduce American students to Asia through study and critical examination of essentially the past century's histories of China and Japan.

42—123 The Discovery of India

Four prepared class periods. For Upper Middlers and Seniors. The title of this course is taken from Jawaharlal Nehru's work written in Admadnagar Fort prison during a five-month internment in 1944. Nehru was seeking to discover India for himself as the molder of an Indian nation. We, as Englishmen before us, are attempting in this short course to begin discovery of the setting, the motivations, and the contemporary problems of an alien people who constitute the second most populous nation on earth. In the Fall Term we are especially concerned with Traditional India: geography, thought, religion, the social setting, and early history. The following Winter Term concentrates on Imperialism (British India), Gandhi, and Indian Independence. Readings may include Nehru; P. Spear, *India: A Modern History* and *India, Pakistan and the West;* H. Smith, *The Religions of Man;* A. M. Frazier, *Readings in Eastern Religious Thought;* P. Woodruff, *The Men Who Ruled India: The Founders,* Vol. I; Robert Payne, *The Life and Death of Mahatma Gandhi;* and M. Brecher, *Nehru: A Political Biography.*

43—123 Modern Europe: A Survey

Four prepared class periods. Open to Upper Middlers and Seniors. The Fall Term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1789-1914, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe: the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers. While the course is designed as a three-term sequence, each term may be taken separately. Reading is from primary and secondary sources, as well

as fiction. Visual materials are used where appropriate. This course has proven to be good preparation for the Advanced Placement Examination in European History.

44—2 **Modern Russia**
44—3 Four prepared class periods. Open to Seniors and to Upper Middlers who have permission of the instructor. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between east and west; the rise of the intelligentsia; Lenin and the Bolshevik Party; the Stalinist totalitarian system; Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs, and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used.

45—1 **International Relations: The Present Patterns**
45—2 Four prepared class periods. For Upper Middlers and Seniors. In its essentials the
45—3 course is limited to the contemporary era of international affairs, a span of years that is now more than a quarter of a century old, extending, from the World War travels of Franklin Roosevelt to the current travels of Richard Nixon. The emphasis is upon the international politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. The course does not seek to fix praise or blame but rather to discern and comprehend the main lines of the predicament and to suggest possible alternatives. Texts purchased by the students are available in paperback. Additional reading is assigned in the periodic literature of journals, monthly and fortnightly publications, and newspapers.

46—2 **Topics in the History of Phillips Academy and Abbot Academy**
46—3 Four prepared class periods or the equivalent. Involving work in the Phillips Academy and Abbot Academy Archives on some aspect of history of the schools, the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment.

47—1 **Victorian England: England in an Age of Expansion**
Four prepared class periods. For Upper Middlers and Seniors. The course is devoted to a study of the major movements and changes that challenged the British people from 1789 to 1901. It is divided into three periods: a study of the background of 1832, the early Victorians, and the late Victorians. The final eight weeks of the course are concerned with the last two periods. Since Victorian literature more directly influenced the life and thought of the times than that of any other period of English history, the course examines closely those writers whose works were influential in adapting English minds and institutions to changing conditions.

48—2 **Radicalism in American History**
Four prepared class periods. For fifteen Seniors. The course examines American radicalism through a primarily biographical approach: the radical tradition, its leaders, their goals and methods, their legacy of achievement and failure. The course centers on Sam Adams and the development of the American Revolution; Henry David Thoreau, the Berrigans and Civil Disobedience; a study of attempts to bring about radical social change through legislation in Reconstruction; Eugene V. Debs and unionism and socialism; biographical studies of Black protest leaders from Frederick Douglass to Martin Luther King, Jr.; and the struggles for women's suffrage and essays on contemporary women's liberation. The stu-

dents study how radicals defined the problems of their times, the new society each envisioned, and the means each prescribed to change the world as it is to the world as it ought to be. The term concludes with an independent project on some phase of contemporary radicalism. The course work consists of readings, discussions, and short analytical papers.

49—12 The City in America
Four prepared periods. Limited to fifteen Seniors and Upper Middlers. Prerequisite: permission of the instructor. Fall Term work focuses on the evolution of the city from prehistoric times through the American colonial period. The Winter Term deals with different "types" of American cities evolving between the Eighteenth and Twentieth Centuries. General readings include: Lewis Mumford, *The City in History;* Alexander B. Callow (ed.), *American Urban History;* Charles Glaab and A. Theodore Brown, *A History of Urban America;* several urban novels like Theodore Dreiser, *Sister Carrie,* and various monographs like Sam Bass Warner, Jr., *Streetcar Suburbs.*

49—3 The City in America
Prerequisite: *History 49-1* or *History 49-2.* The student embarks on individual, historical research projects, either on a particular American city or on a selected aspect of several cities.

50—1 Schools in America
50—3 Four prepared periods. For Seniors and Upper Middlers. (This course is planned parallel to *History 51, Families in America,* and can be taken in a coordinated sequence with that course, as well as a single term-contained offering.)
The course analyzes the purposes for schooling perceived during the nineteenth and twentieth centuries and the institutions Americans created and supported to promote those purposes. Readings are drawn from primary sources—such as essays by Thomas Jefferson, Horace Mann, and John Dewey—as well as from secondary sources, both historical and sociological.

51—2 Families in America
51—3 Four prepared periods. For Seniors and Upper Middlers. (Given parallel to *History 50.* See note under that course description.) The course examines family structure, function and development from the colonial period to the present. Sex role, methods of child nurture, economic base of the family, and varieties of family patterns growing out of different ethnic backgrounds are among the major topics studied. Readings are drawn from primary and secondary sources.

52—1 Utopias
52—2 Four prepared class periods. For Upper Middlers and Seniors. This course focuses
52—3 on the study of Utopias from the Renaissance to Modern Times. The quest for a perfect society changes with the ages and is determined by them. From the Utopias of Humanism (Sir Thomas More, Rabelais) we observe the differences brought about by Enlightenment ideas (Locke, Rousseau). The challenge of the Industrial Revolution creates the proposals of the Utopian Socialists (St. Simon, Fourier, Owen) and of Karl Marx. Solutions to present-day problems are exemplified by B. F. Skinner's *Walden Two,* Huxley's *The Island* and discussions of the anti-utopias of Orwell and Huxley. Comparison of what was, or is, considered an ideal society provides significant insights into the value changes of the last 400 years and the imaginative solutions proposed by men always dissatisfied with the imperfections of today.

53—123 Women in History
Four prepared class periods. For Upper Middlers and Seniors. A chronological full-year sequence but may be elected on a term basis. This course studies the role and status of women in cultures and societies which have influenced and determined our own. Special attention is paid to women who typify their prescribed roles as well as those who defied or ignored convention. In the Fall Term, after a look at the restrictive position of women in ancient Greece, the course considers the development of an enlightened, liberal status for women in Rome. The latter part of the course focuses on the changes brought about by the emergence of Christianity and the subsequent evolution of the early Middle Ages up to the time of Charlemagne. The Winter Term begins with the

Medieval Period which was heir to Christian Rome and then studies the part played by women in early modern times with the Renaissance and the creation of polite society with its ideal of the development of all human faculties. From the 16th century on, women as rulers successfully molded policies and subtly influenced the culture of their time. The classic age of France created the salons where men and women met on an equal basis and where good taste and talent overcame the rigid barriers of rank and sex. With the French Revolution and Romanticism came the belief in equality and from then on the fight against Victorian double standards and for legal and political emancipation was joined. The study of the lives of outstanding women illustrate the successes and failures in the search for women's proper place. The Spring Term studies the women of the 19th and 20th Centuries. In 1848, a year of world revolution, a group of American feminists issued a declaration of women's independence. The statement was more one of hope than of reality. However, during the nineteenth century in this country and in England, the economic status of women began to improve and, as it did so, the hope of political, legal, social, and occupational opportunity began to be realized. The early part of the term focuses on the political feminist movement and compare it with other contemporary reform movements. Women gained the right to vote in the early twentieth century. What did women do with this right? How do the role of women in the twentieth century and the struggle of women to reshape that role reflect or reject traditional American values? The latter part of the course evaluates these and other questions by looking at individual women, both those who typify the traditionally prescribed role and those who defy convention.

54—123 **Modern Europe: An Inquiry into Continuing Issues**
Four prepared class periods. For Seniors. The course, while treating modern European history, is not designed as a standard survey; rather it is an effort to convince students that an essential task of the historian is to confront live issues. As suggested in Tierney, Kagan, and William's *Great Issues in Western Civilization,* "The issues are alive because they come out of the tensions that men have to face in every generation—tensions between freedom and authority, between reason and faith, between human free will and the impersonal circumstances that help to shape our lives." Readings: C. V. Wedgwood, *The King's Peace: 1637-1641;* G. *Ruled;* L. Kronenberger, *Kings and Desperate Men;* R. L. Heilbroner, *The Worldly Philosophers;* P. Robertson, *Revolutions of 1848: A Social History;* B. Tuchman, *The Proud Tower and The Guns of August.* The course is divided into the following term-contained units: Fall Term, AUTHORITY AND FREEDOM: ENGLISH AND FRENCH REVOLUTIONS. Winter Term, IDEALISM AND REALISM: EUROPE'S 19TH CENTURY. Spring Term, PEACE AND WAR: THE TWENTY-YEAR CRISIS.

55—1 **Art and Architecture Before the French Revolution**
Four prepared class periods. For Uppers and Seniors. This course is an introduction to the Western visual arts from the Archaic sculpture of Greece to the late Baroque of the eighteenth century. Looking at major art historical epochs and problems, the course focuses on the Renaissance and Baroque. It also includes occasional visits to the Museum of Fine Arts and the Gardner Museum in Boston.

56—1 **Art and Architecture Since the French Revolution.**
56—2 Four prepared class periods. For Uppers and Seniors. Prerequisite: Successful completion of *Visual Studies (Art 10)* or permission of the instructor. Students planning to take only *History 56* should, if possible, elect it in the Fall Term. This course discusses major movements in the visual arts since the late Baroque through the examination and comparison of representative works. The course, after introducing the mechanics of formal analysis, considers the changes in the French, English and American arts during the late eighteenth and early nineteenth centuries, the problem of academic intolerance, and the rise of Impressionism. Looking at the development of more contemporary schools, it examines the relationship between photography and earlier media, the experiments of Cubism and Expressionism, modern architecture, Surrealism and the New York School. The course includes occasional trips to the Boston Museum of Fine Arts.

History 55, History 56, and Art History 57 when taken consecutively combine to form a full year's preparation for Advanced Placement Examination in Art History.

58—123 History of Ideas in the 19th and Early 20th Centuries
For Seniors and Upper Middlers.

THE INDUSTRIALIZATION OF EUROPE—FREE ENTERPRISE VERSUS REFORM The Fall Term examines the changes brought about by the Industrial Revolution by studying the exponents of Free Enterprise (Adam Smith, Malthus, Ricardo) and the Reformers who through social measures like universal education, legislation, or changes in society's consciousness want to improve the quality of life for mankind. This includes Liberals like Bentham, J. S. Mill, and the Fabian Socialists, who try to reach their aims through gradual legal and political means; Utopian Socialists like St. Simon, Fourier, Robert Owen; the Chartist movement and the development of Labor Unions; and finally, revolutionary movements like Marxism, Anarchism, and Syndicalism. The 20th century develops international regulatory agencies (ILO-WHO) and finally the European Economic Community, the World Bank and the philosophy of an interrelated world economy.

ABSOLUTISM VERSUS DEMOCRACY The Winter Term deals with political ideologies. Authoritarian theories like those of Metternich, De Maistre, Ronald, leading to Bismarck's Real-Politik and Fascism are discussed and contrasted with Liberalism and Nationalism, which move from Fichte's cultural patriotism, the vague liberalism of the 1848 Revolutions to its aggressive phase represented by Treitschke, the Primrose League, Imperialism, Colonialism, and Racism. The development of newspapers and mass media with its molding of public opinion creates the possibility and need for popular support for Government actions and the dangers of emotionalism in politics. Universalism finds its expression in the League of Nations and the United Nations in the attempt to replace obsolete nationalism in view of global interdependence.

SCIENCE VERSUS RELIGION The Spring Term evaluates the growing impact of Science destroying traditional ethical values. Materialism, the impact of Darwin's theory of Evolution not only on the explanation of the environment but on Society as a whole according to Spencer, Freud's revolution in Psychology, and Existentialism create strong opposition from the various religions. Protestant and Catholic reactions against scientific truths which contradict fundamentalist certainties, the reactions of individualist thinkers like Dostoyevsky, Renan, Tolstoy, and Butler, and finally, the attempts to reconcile Science and Faith are examined.

59—123 Ancient History
Four prepared class periods. For Upper Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent but independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History.

Interdisciplinary

All courses are electives. Courses that cross over department lines are listed again here as a reference for the student when planning his program of studies.

Basics Study Skills
10—1 Permission of the instructor required. The course builds both reading and
10—2 organizational skills. The reading program seeks to increase reading efficiency
10—3 (comprehension and speed) by teaching the student how to become more thoughtfully and actively involved with his material. On the organizational

level, the student is involved in skill-building in such areas as note-taking, retention, and exam preparation. (Dr. Irish)

Art 21—123 **Animation**
Prerequisite: *Visual Studies (Art 10).* An introduction into the art of illusion of motion through shooting still images by frame with 16mm sound motion picture film, with emphasis on the relationship of the sound track in structuring the finished product. Given in collaboration with the Music Department, the course may interest either the art student who wishes to explore the visual possibilities of the medium or the music student who wishes to find a vehicle for his original composition. Two class meetings plus six hours preparation.

Art 311—123 **Contemporary Communications**
Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, nonfiction, poetry, drama, motion pictures, and the visual arts. Prerequisites: Successful completion of a course in art or music, and a concurrent commitment to an additional communicative endeavor in creative writing, in art, in music, in performing arts, or in some independent work in mathematics or physical science. Acceptance into the course is based on written application and personal interview. At least one term the course engages in a large group project aimed at public presentation. (Mr. Owen and Mr. Lloyd)

Art 312—123 **Puppetry**
Prerequisite: *Visual Studies (Art 10)* Four prepared class periods. The course aims to expose students to various techniques of puppet construction which may then be tried out regularly before audiences in the Drama Lab, the Andover Public Schools, and the main stage. Fall Term is devoted to the more traditional forms: the hand puppet and the marionette. Winter Term features rod and shadow puppets, less familiar in the U.S., but excellent vehicles for real imagination. Spring Term involves experimentation with various forms, as well as creation of new forms.

English 11—123 **Perception and Expression/Studio**
This course, recommended for Juniors, has four prepared periods and one unprepared period. Taught jointly by members of the English and Art Departments, the course, like *Perception and Expression* (see *English 10)* also seeks to involve the student in a number of experiences intended to increase awareness in the world around us. In addition to reading, writing, and listening, students work with tape recorder and video tape, still and motion camera, and acting, involving group and individual performances in various media. This course exempts students from the photography half of *Visual Studies (Art 10).*

Religion 50—123 **Community Service Independent Project**
Pass/Fail. Seniors and Upper Middlers may be permitted to do certain community projects as an Independent Project. Such projects must be arranged in consultation with the Director of Community Service and are under his supervision. Possible placements: an urban public elementary school, a home for emotionally disturbed children, an inner-city multi-service social agency, etc. Application for this course is done in the same manner as all other Independent Projects and has the same requirements.

Russian 50—1 **Russian Literature in English**
Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, Westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Ostroysky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development.

Russian 51—2 **Soviet Literature in English**
Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions.

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late 20th century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization or dissemination of mathematical knowledge.

To serve all needs the mathematics curriculum is built around a core sequence of eight trimester courses: *11, 12,* and *13* (normally given in the ninth grade); *24, 25,* and *26* (normally given at the tenth grade); and *37* and *38,* completion of which will satisfy diploma requirements and provide a firm foundation for more advanced study. A student entering in the ninth grade with little or no algebra normally starts with *Mathematics 11.* A student entering with one year of algebra takes *Mathematics 20* for one year and join the standard sequence with *37* in his second year. Those with one year of algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 30* for one year.

Beyond the required level, i.e., the equivalent of *38,* the department offers many electives, some of which lead up to and well beyond the Advanced Placement Examinations of the College Board. The prerequisites of such courses should be carefully noted, particularly by those students who are involved in terms away from Andover.

In addition to its course offerings the department manages the campus computer time sharing system. The computer, a Digital Equipment Corp. PDP-11, is housed in the mathematics building and serves nine teletypewriter terminals, of which five are available for student use in courses and projects.

Courses Leading to Satisfaction of the Diploma Requirement:

11—1 Beginning Algebra
Five prepared class periods. An introduction to the language of algebra. The solution of simple equations and inequalities, the study of polynomials in one variable, factoring and word problems. Prerequisite: Less than half a year of algebra.

12—2 Algebra
12—3 Five prepared class periods. Simple functions and their graphs, systems of linear equations, polynomials in two variables, rational algebraic expressions, equations and word problems. Prerequisite: *Mathematics 11.*

11-12—1 Algebra
Five prepared class periods. A "lead-in" course for entering students who have had up to a year of algebra but need their skills strengthened before entering *Geometry.* It normally prepares a student for *13* but if necessary *12* is available in the Winter Term for further strengthening. Prerequisite: From a half to a full year of algebra.

13—1 Introduction to Geometry
13—2 Five prepared class periods. Simple logic, the nature of proof, congruence of
13—3 triangles, parallel lines and parallelograms. Prerequisite: *Mathematics 12, Mathematics 11-12* or the equivalent.

20—0 Geometry and Algebra
Five prepared class periods. A year-long course for entering students who have had a *strong* ninth grade algebra course but no geometry. Satisfactory completion of this course allows entrance to the normal sequence at *Mathematics 37*. Prerequisite: A strong year of algebra.

24—1 Algebra and Geometry
24—2 Five prepared class periods. The Pythagorean Theorem, area of rectilinear
24—3 figures, roots of quadratic equations, fractional equations leading to quadratics, introduction to the use of a computer, elementary coordinate geometry and its use in geometric proofs. Prerequisite: *Mathematics 13* or its equivalent.

25—1 Algebra and Geometry
25—2 Five prepared class periods. This course involves more work on the computer,
25—3 algebraic and geometric inequalities, algebraic functions and geometric transformations considered both from a geometric and functional point of view. Prerequisite: *Mathematics 20* or *24*.

26—1 Algebra and Geometry
26—2 Five prepared class periods. Geometric similarities, radicals and quadratic equa-
26—3 tions, circles, loci and an elementary study of the conic sections centered at the origin. Prerequisite: *Mathematics 25*.

30—0 Intermediate Algebra and Elementary Functions
Four prepared class periods. A year-long course for entering students with one year of algebra and one year of geometry. Completion of this course satisfies the diploma requirements. Topics include use of the computer; the structure of groups and fields, with applications to elementary algebra; polynomial, circular, exponential and logarithmic functions and their applications. Prerequisite: Credit for one year of algebra and one year of geometry.

31—0 Geometry and Circular Functions
Four prepared class periods. A year-long course for entering students who have studied algebra in the ninth and tenth grades but who have not studied geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. Prerequisite: Credit for one year of elementary algebra and one year of intermediate algebra.

32—0 Intermediate Algebra and Selected Topics from Plane Geometry
Four prepared class periods. A year-long course open only to students enrolled at Abbot in 1972-1973. The course completes the mathematics requirement for an Abbot diploma. Quadratic equations, radicals, logarithms, and some trigonometry are covered.

37—1 Algebra and Geometry
37—2 Four prepared class periods. Intuitive ideas of limits, limits of sequences, areas of
37—3 circles, sectors and segments, the circular functions and their applications to solutions of triangles, elementary probability. Prerequisite: *Mathematics 26* or *30*.

38—1 Elementary Functions and Algebraic Structure
38—2 Four prepared class periods. The coordinate geometry of conic sections extended,
38—3 inverse functions, logarithm and exponential functions. The structure of groups and fields, applications of circular functions, probability. Completion of this course satisfies the diploma requirements. Prerequisite: *Mathematics 37*.

40—12 Elementary Functions (T2) (a two-term commitment)
Four prepared class periods. A two-term course for entering Upper Middlers and Seniors who have not had trigonometry but have studied three years of mathematics in high school. Required of those students whose prior work may be found not to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. In certain cases high quality work in *40* may be regarded as satisfying diploma requirements, but *40* is a prerequisite for continuing study at the *50* level. Prerequisite: Credit for three years of high school mathematics. Not open to students from *Mathematics 38* or *39*.

Elective Courses

Only courses with sufficient enrollment will be given.

21—3 Intuitive Calculus
Four prepared class periods. Open to Juniors and Lower Middlers. This course introduces limits in an intuitive manner and begins to develop the calculus of polynomials so useful in elementary Physics. Prerequisite: None.

39—1 Vector Algebra
39—2 Four prepared class periods. The complex number system and its application to
39—3 plane geometry; algebraic properties of scalars, vectors, and matrices with geometric applications. Binomial probability. Students with a serious continuing interest in mathematics should take this elective subsequent to *38* and prior to higher level electives. Prerequisite: *Mathematics 38.*

41—3 Mathematical Models
Four prepared class periods. For Seniors and qualified Upper Middlers. An upper level study of the interrelationship of mathematics and the real world. The creation, testing and use of mathematical models. Prerequisite: *Mathematics 38* or its equivalent.

42—1 Probability
Four prepared class periods. Includes sample spaces, counting problems, sampling, conditional probability, applications using the computer, random variables, expected value, variance and standard deviation. Prerequisite: *Mathematics 38.*

43—2 Statistics
Four prepared class periods. Includes applications to the normal curve of the binomial distribution, hypothesis testing and statistical inference, independent work on experiments and selected topics. Prerequisite: *Mathematics 42.*

44—3 Statistics
Four prepared class periods. Includes elementary statistical inference with applications to social and physical sciences. Estimation and Hypothesis Testing. Prerequisite: *Mathematics 43.*

45—1 Exploring Data
45—3 Four prepared class periods. An introduction to techniques of uncovering the useful information contained in masses of numerical data. In contrast to *43* and *44* no reliance is placed on the knowledge of or development of heavy mathematical tools. Prerequisite: None.

46—2 Theory of Numbers
Four prepared class periods. A study of the elementary theory of numbers, emphasizing the arithmetic of the integers. First consideration given to divisibility and prime numbers, ideas that underlie much of the later work. Other topics considered are congruences, Diophantine equations (and Fermat's Last Theorem), continued fractions, and certain special numbers. Prerequisite: *Mathematics 37.*

47—1 Computer Programming
47—2 An introduction to programming in the BASIC-PLUS code. The solution of
47—3 mathematical problems with computer assistance. Prerequisite: *Mathematics 37* or its equivalent.

49—3 Problems, Brain Twisters and Puzzles
Four prepared class periods. The course investigates a wide variety of mathematical problems. The problems, whose statement may range from one short sentence to a long paragraph, are selected from sources such as prize contests and collections of mathematical problems and puzzles. Both the technique of how to begin to solve a problem and the skills needed in the actual solution are stressed. Prerequisite: *Mathematics 37.*

51—1 Precalculus Mathematics
51—2 Five prepared class periods. This is the first of a three-course sequence that covers
51—3 the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics covered include: sequences and series, convergence and limits, applications to areas, volumes and tangents. Prerequisite: *Mathematics 38* or its equivalent.

52—1 **Elementary Calculus**
52—2 Five prepared class periods. Tangents to curves; derivatives of polynomials, sine, cosine; product, quotient and chain rules; implicit differentiation; graphing; maximum and minimum. Prerequisite: *Mathematics 51* or its equivalent.

53—2 **Elementary Calculus**
53—3 Five prepared class periods. Velocity and acceleration, related rates, integration by parts and substitution, improper integrals, application to area, volume and arc length, and approximations using trapezoid rule. Satisfactory completion of this course prepares for the College Board AB Advanced Placement Examination. Prerequisite: *Mathematics 52.*

54—3 **Infinite Series and Differential Equations**
Five prepared class periods. This course extends the work of *Mathematics 53* to prepared the student for the BC Advanced Placement Examination in Calculus. Prerequisite: *Mathematics 53* or may be taken simultaneously with *53.*

55—0 **Honors Calculus**
Five prepared class periods. A year-long course in analytic geometry and calculus which begins only in the Fall. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52, 53.* Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics 39* or its equivalent with honor grades. In 1974, *Mathematics 38* with honor grades.

61—0 **Calculus Continued and Other Topics**
Four prepared class periods. The course completes preparation for the BC Advanced Placement Examination, but also includes additional topics at the discretion of the instructor. Prerequisite: *Mathematics 53.*

65—0 **Linear Algebra and Vector Calculus**
Four prepared class periods. For students of demonstrated ability and interest who intend to continue their study of mathematics in college. Vector spaces, linear transformations, matrices, determinants, systems of linear equations, the calculus of functions with vector arguments and vector values. Prerequisite: *Mathematics 55* or its equivalent.

Special Courses

30—1 **Mechanical Drawing A**
30—2 Two prepared class periods and four unprepared. Not open to Juniors. A term-contained technical drawing course that includes the use of drawing instruments, geometric constructions and loci, sketching, orthographic projection, descriptive geometry, and sectioning. Special stress is placed on a thorough mastery of Fundamental concepts and skills. This course is a prerequisite for *Mechanical Drawing 31.*

31—2 **Mechanical Drawing B**
31—3 Two prepared class periods and four unprepared. This is a term-contained technical drawing course that involves work in isometric and oblique pictorial projections, rotations, auxiliary views, intersections, developments, dimensioning, detail and assembly engineering drawings, and perspective. Students of special ability are given an opportunity to do more advanced work in a related field of their choice. Prerequisite: *Mechanical Drawing 30.*

30—1 **Navigation A**
30—2 Four prepared class periods. Not open to Juniors. A term-contained course in
30—3 Piloting: i.e., marine navigation within sight of land. Substantial dead reckoning and special case plotting is done on charts and small area plots. Aids to navigation are studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, radio, radar, and Loran. This course is a prerequisite for *Navigation 31.*

31—2 **Navigation B**
31—3 Four prepared class periods. This is a term-contained course in Celestial Naviga-

tion: i.e., navigating at sea by means of the stars, sun and planets. Nautical astronomy is studied. Significant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214 and Nautical Almanac, special lines of position, and the use and correction of a marine sextant. Prerequisite: *Navigation 30.*

Modern Foreign Languages

The foreign language diploma requirement is competence at the level of the third year. Such competence is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of eight, or even seven trimesters, by passing a special examination set by the department concerned.

All foreign languages offered at Phillips Academy are acceptable for college admission. For certain fields of concentration and in certain areas of graduate study, especially for the Ph.D. candidate, specific modern languages are often required. Consultation with academic advisors and college counselors is invited.

The *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are *not* recommended for students of limited language ability. Entering Seniors with no previous language experience must pass a *10-20* course to obtain their diplomas.

All students are encouraged to continue foreign language study beyond the minimum requirement:

French

The French Department offers a six-year course of study. The first two years are devoted to teaching the basic language structure. In the third year, while continuing to progress in the language, a student is given the opportunity to choose the trimester courses which best serve his needs. Fourth and fifth year courses offer study in depth of both literature and civilization. Students who demonstrate unusual aptitude for and interest in the language during the first year of study are invited to enter special sections which move ahead more rapidly without demanding more time. Those who complete the accelerated sequence may meet the diploma requirement after seven trimesters as they move directly into fourth-year courses.

In all courses, students are taught to understand, speak, read, and write the language, paralleling as closely as possible the natural order of learning. French is the language of the classroom and at no time does the Department teach the art of translation.

10—0 French
Five prepared class periods. First-year French for students who have had no previous courses in the language. Students are expected to make frequent use of the language laboratory. Listening comprehension and the use of basic patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced, as well as simple reading material. Text: Capelle et Capelle, *La France en Direct.*

10-20—0 French
Five prepared class periods. Restricted to Seniors, this is an intensive course that

covers the work of the first two levels of the normal sequence. Text: Benamou, Ionesco, *Mise en Train.*

11—0 French
Five prepared class periods. This first-level French course is designed to help the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for him to enter a regular second-level section. The course emphasizes the development of aural-oral skills and prepares for *French 21* the following year. Texts: Valette et Valette, *Lisons;* Cambell et Bauer, *Arsène Lupin.*

12—23 French
An accelerated course offered to students of high ability. This course is continued in *French 22.* Texts: dePetra, *La Clef;* Pimsleur, *C'est la vie.*

20—0 French
Five prepared class periods. For students who have completed *French 10.* While continuing to develop the audio-lingual skills, the aim of this course is to teach reading and the ability to understand non-technical French prose without recourse to translation. Texts: Capelle et Capelle, *La France en Direct,* Valette et Valette, *Lisons.*

21—0 French
Five prepared class periods. For students who have completed *French 11* and for new students who qualify through teacher recommendation or placement examination. The aim of the course is similar to that of *French 20.* Texts: Gibson, *Anthologie;* Ionesco, *Victimes du devoir;* de Petra, *La Clef.*

22—12 French
Five prepared class periods. An accelerated course open to students who have completed *French 12* and to properly qualified new students. Successful completion of this course permits students to enroll in regular courses at the third level during the spring term. Texts and reading materials are basically those of *French 21.*

Third Level Courses

At the third level, progress in all language skills continues through their application in the study of a particular area. A systematic and coordinated grammatical review is incorporated sequentially into all courses. Barson, *La Grammaire a l'oeuvre* is used for this study.

30—123 Contemporary French Life
Four prepared class periods. This course takes a close look at many aspects of modern French civilization and studies the French people's attitude towards the problems of everyday living and thinking. A journalistic and humoristic approach is prevalent in the variety of dossiers presented in the main text by Capellet and Capelle, *La France en Direct 3.*

31—123 Selected Readings
Four prepared class periods. Reading comprehension skills are developed through a study of texts such as the following: Simenon, *Le Chien Jaune;* Saint-Exupéry, *Le Petit Prince;* Pagnol, *Topaze;* Vercors, *Le Silence de la mer;* Goscinny, Uderzo, *Astérix et Obélix: Le Tour de Gaule;* Gide, *Symphonie Pastorale;* Sartre, *Les Jeux sont faits.*

32—2 Village Français
32—3 Four prepared class periods. Using *Les Deux Villages* by Wylie and Bégué as a basic text, the course, conducted in French, attempts to reveal the peculiar characteristics of the French people as reflected in the microcosm of a town. Several American and French towns are examined as bases of comparison. Additional readings may include Wylie, *Village en Vaucluse;* Lynde, *Middletown, U.S.A.;* Pagnol, *Marius;* Michaud, *Guide France,* "Nouvel Observateur"; Daninos, *Les Carnets du Major Thomson;* Maurois, *Histoire de la France;* articles written

by Art Buchwald, and texts used by French students studying American civilization.

33—12 Le Monde Francophone: French Civilization Outside of Europe
Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the resistance to and the assimilation of French culture by the native cultures. During the Fall Term the students develop their various language skills through a study of French in Africa—West Africa, Equatorial Africa, and North Africa (Arab). In the Winter Term the emphasis is upon French in America—the Antilles (Haiti, Martinique, and Gaudeloupe), the U.S., and Canada. Together with a geographical, social, and historical study, selections are read from Président Senghor, Camara Laye, Bernard Dadie, Memmi, Aimé Cesairé, Guillaume M'Bia, Birago Diop, Félix Leclerc, and Gilles Vigneault.

34—1 Intensive Conversation and Phonetics
34—2 Four prepared class periods. A special emphasis on specific aspects of spoken French. Intended for students who understand French rather well but need to gain confidence and efficiency in speaking. Dialogues, speeches, debates, interviews, and role-playing are reinforced by study of topical vocabulary, idiomatic expression, and applied phonetics.

35—1 Written Expression
35—2 Four prepared class periods. Study and writing of basic sentence structures and
35—3 their integration into paragraphs and compositions. Students' writing, to which instructors give close, individualized attention in small classes, is based generally on selected, short readings such as those in *Creative French,* Hammond & Barrow eds. or *R.S.V.P.: Invitation à Ecrire* by Beaujour and Regalado. The course seeks a balance between different forms of writing, both original and imitative, (description, narration, dialogue, exposition, communication). This course is recommended for students planning to take *French 42.*

36—123 Literature and Film
Four prepared class periods. This course studies a variety of French novels and plays and the films which have been made based on these works. After the book has been read, the film is viewed several times and is examined to see if, how, and why the two versions differ. For those films which are not adaptations of existing books, but for which published scenarios exist, the latter are read and studied before viewing the film. Each term, approximately two different book/films are studied, and might include such works as; Cocteau, *La Belle et la bête:* Sartre, *Les Jeux sont faits;* Sartre, *Les Mains sales;* Pagnol, *Marius;* Duras, *Moderato cantabile;* Gide, *La Symphonie pastorale.*

37—2 French Poetry and Song
Four prepared class periods. A participation course for students who enjoy reciting and singing for fun. Poetry includes selections from all periods, classical and modern, from Villon to Prévert as well as from such dramatic works as Corneille's *Le Cid* and Rostand's *L'Aiglon.* Selections are from the French song repertoire of traditional, folk, patriotic, modern, popular, and humoristic chansons. Students taking this course must be willing to participate actively in all aspects of it.

38—3 French for Tourists
Four prepared class periods. The aim of this course is to provide the practical vocabulary needed to cope with everyday situations: how to handle affairs at the airport; going through customs; making a hotel reservation; taking a taxi, the subway, or a bus; visits to the bank, the hairdresser, or the doctor; buying clothes or footwear; going to a restaurant, the movies, or the theater; how to use the telephone; travel by train; motoring; and visiting a seaside resort. Emphasis is on oral communication and the acting out of situations in class, supplemented by regular use of the language laboratory.

39—3 Initiation to the French Theatre
Four prepared class periods. An active participation course in which the student

follows one play from the initial reading through its final production, taking part at each step of the way. Four major phases: Reading, Analysis, Production, Performance. Throughout the course, the vocabulary of French theatrical production is studied and used.

40—123 French
Four prepared class periods. The course consists of three term-contained units and may include the reading of French classics and the works of modern authors, as well as conversation and composition. The choice of texts in each trimester is determined by the class and the instructor.

42—0 French Literature
Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open to all students who have completed three trimesters of third-level courses and who have the approval of their instructor, and to properly qualified new students. It is a transition from the study of language to the study of literature. Emphasis is placed on vocabulary building, written work, and close analysis of major literary works. Texts include: Camus, *L'Etranger;* Voltaire, *Candide;* Molière, *Le Bourgeois gentilhomme;* Balzac, *Le Père Goriot;* and Flaubert, *Un Coeur simple.*

43—123 French Civilization
Four prepared class periods. Open to well-qualified Upper Middlers and Seniors who have completed three trimesters of third-level courses and to new students with departmental approval. Students who elect this course should be interested in France's cultural achievements, influence, and contemporary life. The course is a combination of lectures by instructors, class discussions, slide and film presentations, students' oral reports, and written themes on a wide variety of topics. It is complemented occasionally by the reading of short literary and historical selections illustrating cultural and artistic developments. Areas of study include history, geography, economics, art and architecture, music, as well as modern French institutions, French youth, and the role of women in French society. The Paris weeklies L'Express and Paris-Match are read and used extensively by students in the third trimester. The course is taught jointly by several members of the department.

44—2 Québec et les Québécois
A study of the culture of the Province of Québec, which examines its history; its social, political, and economic institutions; its religions, educational, and artistic life; its achievements, frustrations, and aspirations. Emphasis is on close study of the media of the Province. The course may culminate in a trip to Québec.

50—123 French
Four prepared class periods. Open to students who have completed the fourth level but do not wish advanced placement. The choice of texts is determined by the class and the instructor and runs the gamut from *Astérix* to the theater of the absurd. It is taught principally through seminar discussions and conversations, with occasional oral readings and composition.

51—0 French Language
Five prepared class periods. A course designed to meet the requirements of the new Advanced Placement Examination in French Language. Open by invitation to students who have completed *French 40* or *French 43* and to qualified new students. Emphasis is placed on grammar, vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals.

52—0 French Literature
Five prepared class periods. The second year of a two-year sequence, open to students who have completed *French 42* and to others who are properly qualified, with departmental permission. This course is an introduction to French literature and prepares for the Advanced Placement Examination in French Literature through the close reading of representative texts including: Corneille, *Le Cid;* Molière, *Le Tartuffe;* Racine, *Brittanicus;* Stendhal, *Le Rouge et*

le Noir; Hugo, *Les Contemplations;* Baudelaire, *Les Fleurs du mal;* Sartre, *Huis clos;* Mauriac, *Thérèse Desquéroux;* Beckett, *En attendant Godot.*

60—123 Contemporary French Literature
Four prepared class periods. Open to students who have completed the fifth-level and to other well-qualified students with departmental approval. The course consists of three term-contained units covering THE PRE-WAR NOVEL, DRAMA, and THE POST-WAR NOVEL, respectively. Authors studied may include: France, Barrès, Proust, Gide, Céline, Bernanos, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Montherlant, Anouilh, Giraudoux, Aymé, Camus, Sartre, and Robbe-Grillet. *French 60* is not a literary history course. Emphasis is on particular writers and what they add to our understanding of the human condition in our times.

Senior Projects
Seniors who are taking an advanced French course or who are otherwise qualified may do apprentice teaching during either the Winter or Spring Term. They study the techniques and methods of modern language instruction; and they practice, under careful supervision, in beginners' classes. Seniors may also undertake independent study projects in French under the direction of a faculty supervisor.

German

The German Department offers a six-year course with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. The more advanced courses give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. German is used as the classroom language. Extensive use is made of the Language Laboratory.

The Department offers an accelerated course, *German 21,* for students who show unusual ability in *German 10.* After completion of *German 21,* these students enter *German 40* and receive four units of credit after three years of study.

10—0 German
Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Text: Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner.*

10-20—0 German
Five prepared class periods. The course is designed for qualified Seniors who wish to complete in one year the material covered in *German 10* and *20.* It follows approximately the outline of those two courses.

20—0 German
Five prepared class periods. The systematic study of basic patterns and grammar is continued with Schulz-Griesbach, *Deutsche Sprachlehre fur Amerikaner.* Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten;* Schnitzler *Der blinde Geronimo;* Remarque, *Drei Kameraden;* Bichsel, *Kindergeschichten.*

21—0 German
Five prepared class periods. An accelerated course for qualified students, covering material of both *German 20* and *German 30.* Successful completion enables a student to enter *German 40.*

30—0 German Literature
Four prepared class periods. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review.* Some of the books read include Brecht, *Kalendergeschichten.* Durrenmatt, *Der Richter und Sein Henker;* Aichinger, *Der Gefesselte und andere Kurzgeschichten;* Dürrenmatt, *Der Besuch der alten Dame.* Emphasis is placed on reading, comprehension, vocabulary building, and oral work.

31—0 German History, Culture and Geography
Four class periods. Continued review of grammar in Sparks and Vail, *German in Review.* Readings in history using W. Koepke's *Die Deutschen* as the basic text. Historical, cultural, and geographical materials are used as the background for emphasis on vocabulary building, writing, and oral expression.

40—123 German Literature
Five prepared class periods. Introduction to German Literature. This course prepares for the Advanced Placement Examination. Through detailed stylistic analysis of a number of outstanding works, the students gain an acquaintance with some of the major authors and most significant trends in German literature since 1750. The works read include Brecht, *Der kaukasische Kreidekreis;* Büchner, *Woyzeck;* Dürrenmatt, *Die Physiker;* Hauptmann, *Bahnwärter Thiel;* Hesse, *Siddharta;* Kafka, *Die Verwandlung;* Mann, *Tonio Kröger;* and selected poems from Goethe to the present.

50—123 German
Four prepared class periods. Contents vary according to the needs and interests of the students.

60—123 German
Four prepared class periods. Contents vary according to the needs and interests of the students.

Senior Project
Under the guidance of a member of the German Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class or work of his own choice in a special field.

Italian

10-20—0 Italian
Intensive beginning course in Italian. Five prepared class periods. Open to Seniors. The course covers the fundamentals of Italian grammar and seeks to develop reading and speaking skills. Texts: Speroni and Golino, *Basic Italian;* Sperone and Golino, *Panorama Italiano;* Moravia, *Racconti;* Levi, *Cristo si e fermato a Eboli.*

Russian

The Russian Department offers a course of four years of study. An accelerated sequence enables able students to complete four years' work in three, and receive four units of credit. There is also an accelerated course for Seniors.

Since Russian is, indeed, more "foreign" to native speakers of English than the traditional languages of Western Europe, the complete exclusion of English during the first term is neither practical nor desirable. However, it is the policy of the Russian Department to attain the

exclusive use of Russian, instructional and conversational, no later than mid-way through the first year's study, and from the first meeting of the accelerated sequence *(11)*. The entire program develops skill in speaking, aural comprehension, reading, and writing.

10—0 Russian
Five prepared class periods. A year-long elementary course in speaking, listening, reading, and writing. Texts: von Gronicka, *Essentials of Russian* (Prentice Hall); Bash, *Uchebnik Russkovo Iazyka,* Part I; Reference materials. Open to Juniors, Lower Middlers, and Upper Middlers.

11—23 Russian
Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *Russian 10.* Successful completion of two terms of *11* enables one to enter *22.* Texts are essentially the same as those used in *Russian 10* and *Russian 20.*

10-20—0 Russian
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering two years in one. Texts: *ALM Russian Level One and Two* (Harcourt); *Graded Russian Readers* (Heath).

20—0 Russian
Five prepared class hours. Completion of the elementary course with continued emphasis on active use. Texts: von Gronicka, *Essentials of Russian* (Prentice Hall); Bash, *Uchebnik Russkovo Iazyka,* Part I; Reference materials, and selected literary materials.

22—0 Russian
Five prepared class hours. A year-long accelerated course open to students who have successfully completed *Russian 11,* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30.*

30—0 Russian
Four prepared class periods. Reading, conversation, and writing, based on a variety of authors. Texts: S. Khavronina, *Russian as We Speak It* (Progress-Moscow); Bash, *Uchebnik Russkovo Iazyka,* Part 2, and selected literary materials.

40—123 Russian
Fall Term, SOVIET PROTEST LITERATURE. The development of protest in the Soviet Union as seen through the works of Zamyatin, Solzhenitsyn, Tertz, Daniel, Yevtushenko, Okudzhava and others.
Winter Term, THE SOVIET PRESS. A view of the Soviet system as reflected in the media. The text is a subscription to a major Soviet newspaper.
Spring Term, SOVIET POETRY. Reading and analysis of the poetry of Pasternak, Rozhdestvensky, Yevtushenko, Akhmadulina, Voznesensky, Brodsky, and others. The sequence of these topics may be altered according to the needs and interests of the students.

50—1 Russian Literature in English.
Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, Westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Gonsharov, Ostroysky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development.

51—2 Soviet Literature in English.
Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions.

Spanish

The Department of Spanish offers a sequence of four years; able students, by accelerating after the first year, may complete five courses. The aim is to have the students understand the language and speak it fluently. Spanish is used constantly in the classroom. The students learn to read and write the language with ease, and are given a comprehensive introduction to the literature and culture of Spanish and Hispanic America.

10—0 Spanish
Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. The basic texts are: *Español: A Descubrirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill); *Cuaderno de Ejercicios,* by Schmitt, Woodford and Marshall (McGraw-Hill) and *Chispa,* by CCC-CEAC and Librairie Hachette (Xerox Education Publications). They are supplemented by language laboratory practice and other audio-visual materials. Exercises and reading and writing are introduced after the student has acquired confidence in oral expression.

10-20—0 · Spanish
Five prepared class periods. Designed for qualified Seniors who wish to complete in one year the material covered in *Spanish 10* and *20.* The basic texts are *Español en español,* by A. A. Graupera and F. Pace (Van Nostrand Reinhold Co.), and selected reading. Past readings have included such books as: *Cuentos Americanos,* ed. D. D. Walsh (Norton); *Primeras Lecturas, Una Historia Incompleta,* by Gómez del Prado and J. A. Calvo (Odyssey Press); and *Lluvia roja,* by Jesús Goytortúa (Appleton-Century-Crofts).

15—0 Spanish
Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20.* The course stresses the oral use of the language, Outstanding performance in this course qualifies the student for *Spanish 25* or *Spanish 30.* Texts: *Español en español,* by A. A. Graupera and F. Pace (Van Nostrand Reinhold Co.); *Adelante,* by CCC-CEAC and Librairie Hachette (Xerox Education Publications) and selected reading. Past readings have included: *Cuentos americanos,* ed. D. D. Walsh (Norton) and *Primeras Lecturas, Una Historia Incompleta,* by Gómez del Prado and J. A. Calvo (Odyssey Press).

20—0 Spanish
Five prepared class periods. A continuation course that emphasizes speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic texts are: *Español: A Sentirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill); *Adelante,* by CCC-CEAC and Librairie Hachette (Xerox Education Publications) and selected readings. Past readings have included: *Cuentos americanos,* ed. D. D. Walsh (Norton) and *Antología del Realismo,* ed. E. D. Carter (Odyssey Press). Ample language laboratory practice and audio-visual materials reinforce classroom procedures.

23—0 Spanish
Five prepared class periods. Open to students who have completed *Spanish 10* with honors. It covers the equivalent of the material of *Spanish 20* and *30.* Successful completion enables a student to enter *Spanish 40* or *45.* The basic texts are: *Español: A Sentirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill) and *Lazarillo,* by CCC-CEAC and Librairie Hachette (Xerox Education Publications). Past readings have included: *El Gesticulador,* by Usigli (Appleton-Century-Crofts); *Cuentos americanos,* ed. Walsh (Norton); *En la ardiente oscuridad,* by Buero Vallejo (Scribner's); *El sombrero de tres picos,* by Alarcón (Macmillan); and *Doña Perfecta,* by Pérez Galdós (Dell Publishing Co.).

30—0 Spanish
Four prepared class periods. An advanced course, which continues to develop oral and aural skills, as well as facility in written composition. Texts (supplemented by additional reading): *Nosotros somos Dios,* by Wilberto Cantón, edited by Trifilo and Soto-Ruiz (Harper and Row); *El Cuento,* ed. by J. A. Crow and E. J. Dudley (Holt, Rinehart and Winston); *Doña Perfecta,* by Pérez Galdós (Dell Publishing Co.); and *Lazarillo,* by CCC-CEAC and Librairie Hachette (Xerox Education Publications).

31—123 Spanish
Four prepared class periods. Group projects in Self-Expression. Designed for students who wish to improve their skills in listening, speaking, reading and writing. Basic material is selected from newspapers, short stories, satirical essays, news broadcasts, slides and filmstrips. Each student is expected to participate actively in the daily conversation exercises and to write at least one composition each week. Special needs of students who plan to work in a Spanish speaking community or travel in a Spanish speaking country can be considered. Present texts are: *Conversación y Contraversia: tópicos de siempre,* by A. C. Díaz and N. R. Iorillo (Prentice-Hall); *Mr. Clark no toma Poca-Cola* by Penuelas and Sharp (McGraw-Hill); and *Lazarillo,* by CCC-CEAC and Librarie Hachette (Xerox Education Publications).

32—123 Spanish
Four prepared class periods. The course consists of three term-contained topics. The Fall Term topic is devoted to a thorough review of grammar and exercises in composition. The text is: *Gramática Española de Repaso,* by F. Ugarte (The Odyssey Press). The Winter Term topic is a study of Spain, its culture and history. The text is: *Espana y los Españole* by J. F. and M. A. Cirre (Holt, Rinehart and Winston). The Spring Term topic is a concentration on the culture and civilization of the Spanish-speaking countries of this hemisphere. The text is: *Latinoamérica: sus Culturas y Sociedades,* by H. E. Lewald (McGraw-Hill Book Co.).

40—123 Spanish
Four prepared class periods. The purpose of the course is to introduce the student to the Hispanic world through the study of its history and literature. Texts: *Tesoro Hispánico,* ed. Lado et al. (McGraw-Hill); *El Burlador de Sevilla,* by Tirso de Molina (Taurus Ediciones); *Doña Bárbara,* by Rómulo Gallegos (Fondo de Cultura Economica); *Poesía Hispánica,* by A. A. de Del Río (Holt, Rinehart and Winston).

45—123 Spanish
Five prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a fairly fluent ability in conversation. Constant use of the Spanish language in the classroom discussions and written assignments are required. Particularly able students may take the Advanced Placement Examination if they so desire. The basic texts are: *Poesía Hispánica,* by A. A. de Del Río (Holt, Rinehart and Winston); *Abel Sánchez,* by Unamuno (Austral); *Lorca, Obras escogidas,* ed. V. Llorens (Dell); *Bodas de Sangre,* by García Lorca (Losada); and *Los de abajo,* by Azuela (Fondo de Cultura Economica). Novels, plays and essays found in such collections as *Biblioteca Clásica Ebro* and *Clásicas Castellanas* are also read.

50—123 Spanish
Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *45,* or with the permission of the instructor. The emphasis of this course is based on a study in depth of two significant authors each term. In the past the following texts have been used: *Cien años de soledad, La Malahora,* by García Márquez (Editorial Sudamericana, Buenos Aires); *Historia universal de la infamia,* by Borges (EMECE, Argentina); *En torno al poema,* ed. García Montoro and S. A. Rigol (Harcourt Brace, World); *Tres novelas ejemplares, y un prólogo,* by Unamuno (Austral); *Yerma* and *La casa de Bernarda Alba,* by García Lorca (Losada); *Cantos de vida y esperanza,* by Rubén Darío (Austral); *La familia*

de Pascual Duarte, by Camilo Jose Cela (Appleton-Century-Crofts); *El árbol de la ciencia*, by Pio Baroja (Alianza Editorial); *Sonatas*, by Valle Inclán (Austral); and outside reading.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of any of the courses listed with the exception of Band, Orchestra, and Chorus. These require two trimesters to fulfill the diploma requirements. Entering Upper Middlers must take a trimester course in Music or Studio Art at the academy. Entering Seniors need not take a Music course.

The objective of the Music Department is to provide a theoretical and practical musical experience for every student, thereby developing in the student a thorough understanding of music as an aesthetic art form. The student with no previous knowledge of music is offered the chance to learn. Classes in theory, history, appreciation and applied music are available at all levels—beginner, intermediate and advanced. There is ample opportunity to participate actively through individual lessons, recitals, group rehearsals, formal and informal concerts, and at least one stage production each year.

Applied

10—1 **Beginning Instruments**
10—2 Three prepared class periods. Open to Juniors, Lower Middlers, and Upper Mid-
10—3 dlers. Each section of instruments meets three times a week. On non-class days individual practice is required. Each section is taught separately without mixing woodwinds, brass, or strings. After completion of the course, a student should be able to progress to individual private instruction. Instruments taught: flute, clarinet, trumpet, trombone, tuba, and orchestral strings. Limited enrollment.

A fee of $10 per term is charged for rental of school-owned instruments.

11—1 **Beginning Recorders**
11—2 Pass/Fail. Three prepared class periods. Open to all classes, but only to those
11—3 students who have not had previous experience. It is designed for the very beginner. There is a fee of $10.00 per person to cover the cost of a recorder, an instruction book, and other material used. Enrollment is limited to twenty students per term.

12—1 **Brass Ensemble**
12—2 Meeting three times a week, with outside preparation. Open to all classes. Open
12—3 to qualified intermediate or advanced players by permission of the instructor. The group has an opportunity to perform in Chapel and in other concerts. The ensemble is made into different types of groups, such as trios, quartets, quintets, and double brass choirs, to perform Renaissance, Baroque, and contemporary brass literature.

13—1 **Woodwind Ensemble**
13—2 Meeting three times a week, with outside preparation. Open to all classes. Open
13—3 to qualified intermediate or advanced players by permission of the instructor. The ensemble is organized to allow a unique and comprehensive experience in the study and performance of chamber music repertory, in varied sizes of ensembles. Playing chamber music is an essential part in the development of the woodwind student.

14—1 **String Ensemble**
14—2 Meeting three times a week, with outside preparation. Open to all classes. Open
14—3 to qualified intermediate or advanced players by permission of the instructor.

These students find a wealth of fine music written for various combinations of instruments, ranging from the relatively easy to the very difficult. Over the centuries composers have considered the strings a favored group. Chamber music is a particularly rewarding experience and is valuable training for all string students.

15—1 **Fidelio Society**
15—2 Meeting three times a week, with outside preparation. Open to all classes. This
15—3 small group of mixed voices is selected from the *Chorus*. It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*.

16—1 **Band**
16—2 Meeting two double-periods per week in the evening with required outside
16—3 preparation. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating. Volunteers from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given.

17—1 **Chorus**
17—2 Meeting for two double-periods per week in the evening with required outside
17—3 preparation. Open to all qualified students. The *Chorus* is the academy's major singing group, comprised of mixed voices and performs a variety of choral works, both sacred and secular. Its several concerts are held on campus and off including the annual Methuen Memorial Music Hall concert. Membership is by audition in which the following factors will be considered: range, tone, hearing and imitating pitches and rhythms, and reading music. The ability to read music is not required, if other factors are good. Audition material may be obtained from the Music Department Office before tuying out.

18—1 **Chamber Orchestra**
18—2 Meeting two double-periods per week in the evening, with required outside
18—3 preparation. Open to all classes. Most of the music played is for string orchestra; the best winds in the school are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate.

19—1 **Private Instrumental and Vocal Lessons**
19—2 Weekly instruction in keyboard, orchestral, and band instruments, in classical
19—3 guitar, or in voice. For private instruction, covering piano, organ, voice, classical guitar, orchestral and band instruments, there is a separate charge of $65 per term for half-period instruction, or $130 per term for full-period lessons and a nominal fee for the use of practice pianos and organs. It is sometimes possible to make arrangements for an advanced student to study with members of the Boston Symphony Orchestra or other instructors who are specialists. A student must assume costs of lessons and transportation.

20—1 **Musical Perception**
20—2 Four prepared class periods. Open to Juniors and Lower Middlers. *What is*
20—3 *music?* This course introduces the musical novice to basic music listening, reading, and writing skills. The elements of music (rhythm, melody, etc.) are approached separately through reading, listening, and through written assignments, including some original compositions. Although much of the required listening is to classical music, folk, popular, and other types are studied as well.

21—1 **Introduction to Music**
21—2 Four prepared class periods. Open to Upper Middlers and Seniors. A slightly
21—3 irreverent look at music in particular and the fine arts in general as they reflect the

social, economic, and geopolitical circumstances of each era since 1700. A little time is devoted to the development of a common vocabulary through study of the elements of music and the instruments of the orchestra, but this is essentially a study of people and their music in relatively recent history. Concert and folk music, as well as the contemporary use of tapes and synthesizers, are illustrated through recordings. The only prerequisite is an open mind.

History and Appreciation

The following sequence of courses in the history and literature of music is team-taught by members of the department. There are no prerequisites, except for the *Independent Study* term. The sequence takes one and two-thirds years to complete. Courses on *Romantic Music* and *Modern Music* will be given in the Fall and Winter Terms of 1975-1976. The sequence will be offered again, beginning with *Medieval and Renaissance Music* in the Spring of 1976. Each course is term-contained.

22—1 Medieval and Renaissance Music (to 1600)
Four prepared class periods. Open to Upper Middlers and Seniors. This course surveys what is commonly called Early Music, from the earliest known chant to the fully developed Renaissance motet and madrigal. Much of the music from this period was written "for the glory of God." But the secular side of things is considered, too, especially the rise of instrumental music (for harpsichord, recorder, etc.) and the madrigal, with its texts of love, nature, and humor.

23—2 Baroque Music (1600-1750)
Four prepared class periods. Open to Upper Middlers and Seniors. This course surveys music from the first opera to the late works of Bach and Handel. The grand, dramatic style known as Baroque are seen in its most lavish form, opera, in choral masterpieces such as the *Messiah*, in sacred music such as Bach's organ works, and in instrumental music such as the Brandenburg Concertos. The settings for this music, from the relatively humble churches of Bach's Leipzig to the magnificent Palace of Versailles are considered.

24—3 Classical Music (1750-1820)
Four prepared class periods. Open to Upper Middlers and Seniors. In this relatively short period grew and flourished what is considered the Classical style of Western music, and with it came the newly-created symphony. Haydn, Mozart, Beethoven, and others wrote in this new form as well as composing concertos, sonatas, string quartets, and some of the older forms, such as opera and religious music. The historical backdrop to this music—the Enlightenment, the Revolution (American and French), and the Napoleonic Era—are also considered.

27—2 Independent Study in the History and Literature of Music
27—3
Four prepared class periods. Open to Upper Middlers and Seniors. A student who has taken at least one of the other courses in this sequence may, with the permission of the instructor, pursue an independent course of study in either a particular type of music of a particular period of music. This should be related to the period or periods covered in the student's previous course work in this sequence.

28—3 Jazz
Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W. C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

Theory

30—1 Orchestration I
Three prepared class periods. Open to Lower Middlers, Upper Middlers and Seniors. A comprehensive study of all orchestral and band instruments and their use

in these organizations. Instruments in each section (strings, woodwinds, brass, and percussion) are studied separately, as well as instruments which are not a regular member of the orchestra or band, i.e., piano, organ, etc. Demonstration of all instruments are given by faculty members and competent students, as well as by recordings and tapes. This course prepares the student for the Winter Term course in *Orchestration II (Music 31).* Prerequisite: the ability to read music.

31—2 Orchestration II
Three prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors, who have taken in Fall Term *Orchestration I (Music 30).* This course is designed to teach arranging for each instrument in their separate choirs, the combination of instruments of other choirs, instrument substitution, and gradually increasing into full orchestration for symphony orchestra and symphonic wind band. Prerequisites: some knowledge of harmony, and *Orchestration I (Music 30),* or by special permission of the instructor.

32—3 Conducting
Three prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course teaches the student to cope with the problems of rehearsals of musical organizations. The student learns the techniques and patterns of conducting, and the reading and analysis of scores. Students use recordings, and may have the opportunity to conduct the school orchestra, band, and chorus. Prerequisite: the ability to read music. Suggested prerequisite: *Orchestration I (Music 30)* and/or *Orchestration II (Music 31),* or by special permission of the instructor.

33—1 Theory of Music I
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Open to Juniors with permission of the instructor. This course is for the non-musician or beginner to learn the basic vocabulary of music, including clefs, keys, notes, scales, rests, triads, music reading, forms, and ear-training.

34—1 Theory of Music II
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music I* or permission of the instructor. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation and a continuation of *Theory I.*

35—2 Theory of Music III
35—3 Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music II* or permission of the instructor. This course deals with harmonic progressions, modulations, figured bass, and an introduction to counterpoint and harmonic analysis.

36—1 Theory of Music IV
36—3 Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music III* or permission of the instructor. This course includes advanced figure bass, more complex chords, and a brief introduction to 19th and 20th century techniques.

'erforming Arts

All courses are electives, open to Seniors, Uppers, and Lowers, but to Juniors only with permission of the instructor, unless stated otherwise. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extra-curricular work on plays. A variety of experiences are available—some courses are performance-oriented; some are theory-oriented—some are both. Theatre students may supplement their classwork by becoming involved in any of the numerous productions mounted each year, or they may be invited to join the Andover Dramatic Touring Company, which in 1973 and 1974 became part of an exchange program with Manchester

Grammar School in England and toured with *Our Town* and *Harvey* respectively.

Theatre Courses

21—1 **Scene Study**
Four class periods. Open to students with all levels of experience. A minimum of three acting exercises and three short scenes (or a one-act play) prepared in depth is required of each student. All work is videotaped and replayed for detailed analysis. One paper is required: an in depth character study and history of the character whom the student portrays in his final scene. Emphasis is placed on the techniques that an actor utilizes to achieve a sense of reality on stage—techniques that help the actor make his character interesting and believable. (Mr. Bastian)

21—2 **Introduction to Theatre**
Pass Fail. Four class periods. Open to all classes. Minimum preparation. Designed primarily for students whose experience in high school theatre is limited and who wish fuller acquaintance with the elements of stage work. The course focuses on technical theatre: lighting, make-up, design, costuming, and set construction.

22—12 **Plays in Production (T2)** (a two-term commitment)
Four class periods. The course uses both classical and modern scripts to provide a range of dramatic experiences. The class studies plays in depth and detail to see how they might be acted, directed, and staged, beginning with script analysis and ending with the staging of scenes, and design and construction of sets and props. Playwrights studied have been Miller, Wilder, Guare, Shakespeare, Simon, and Brecht; the choice of plays depends largely upon the interests of the students. (Fall Trimester: Mr. Owen; Winter Trimester: Mr. Bellizia)

23—3 **Plays in Production**
Four class periods. Open to all classes. Prerequisite: *Theatre 22*, or a term of *Theatre 24*, or production experience. This course is similar in content and approach to *Theatre 22*, but it is more performance-oriented, undertaking group acting, directing, and design projects aimed at presentation. The specific content depends somewhat upon the abilities and interests of the group. (Mr. Bellizia)

24—123 **Theatrical Production Sequence**
Four class periods. Open to all classes. Fall Term: DIRECTING WORKSHOP. Dedicated to the idea that the director's job is the most complex in theatre, the course is designed for students who have had at least some acting experience and who now wish to study the art of directing. Class members experiment with manageable scenes and plays which they direct; they examine books on the subject (such as Peter Brook's *The Empty Space)* and play scripts, and various styles of direction, interpretations of scenes, and types of drama from classical and contemporary periods. Emphasis is placed upon the responsibilities of the director: to his actors, his audience, and his playwright. Winter Term: ACTING WORKSHOP. A theoretical and practical consideration of various acting styles, both classical and contemporary. Through the use of acting exercises, theatre games, improvisation, but with emphasis on scene work from specific plays, the student moves toward a greater understanding of the actor's task and responsibility on stage. Spring Term: SCENE DESIGN AND STAGE LIGHTING. A study of the art and artistry of the backstage crafts and technologies from periaktoi of ancient Greece to the present. Through a combination of theoretical discussion of plays, applied practice in the scene shop, and a study of Parker and Smith's definitive text, the student gains a broader understanding of set design, scene lighting and construction, stage rigging, and lighting instruments. Practical design and construction problems are solved by the class in connection with productions mounted during the term. *(Theatre 24-1* not offered in 1974-75: Mr. Bellizia)

25—2 **Shakespearean Workshop**
25—3 Pass Fail. Open to all classes. Little preparation required. Four class periods. The

course meets in the Drama Lab to discuss, rehearse, record, and audit Shakespeare's plays. (Winter Term: Mr. Bellizia; Spring Term: Mr. Owen)

26—23 **Playwriting**
Four class periods. In addition to reading from their own works-in-progress, students examine the formal elements in plays by Sophocles, Shakespeare, Williams, Miller, Beckett, and others, as well as certain key works in literary criticism. (Mr. Owen)

27—1 **Introduction to Dance**
27—2 Four prepared class periods. A formal course in movement and composition; it
27—3 introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and discipline of modern dance.

28—1 **Drama, as Theatre and as Literature**
This course centers on the theatrical expression of drama. Students study archetypal plays and their manifestations in the theatre: as drama, opera, and adaptation. Among the works studied—*Antigone* of Sophocles; the opera *Antigonae* of Carl Orff; and Anouilhs *Antigone;* the *Macbeth* of Shakespeare, Verdi, and Ionesco, as well as *MacBird.* Similar studies of *Billy Budd, Faustus,* historical drama, and Commedia Dell'arte. (Dr. Goodyear)

This course is intended to be the beginning of a sequence with *English 508-23.*

Physical Education

All new Juniors and new Lowers are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

10—1 **Physical Education**
10—2 Pass/Fail. Limit of fifteen students per section. Four morning class periods per
10—3 week. The program consists of four phases:
1. Track—a run, jump, throw, self-development program;
2. Ropes—elementary gymnastics and climbing;
3. Physical Fitness—an introduction to physical conditioning and weight training;
4. Drownproofing—a survival technique, swim course.

Two periods per week are spent on Drownproofing and two on the other three phases.

Psychology

The Psychology Department offers two term-contained courses as electives.

10—1 **Human Awareness**
10—2 Pass/Fail. For Juniors and Lowers; Limit of fifteen students per section: A
10—3 course in human awareness in which the students explore the relationship of their thoughts and feelings to their behavior with other people. Topics explored cover a wide variety of dilemmas encountered in all group experience including dilemmas of membership, isolation, communication and leadership. These topics are related directly to the experience of living in a boarding school and to the feelings and frustrations that develop in making the personal choices and setting the personal boundaries that finding a way to belong, managing loneliness and loss, making and keeping friends, coping with peer pressure, resolving conflict with others, and choosing the priorities of one's goals and values entails. Members of the class design role plays, case histories, and games which challenge the ability of the class to solve some of these dilemmas as a group.

30—1 **Human Relations**
30—2 Pass/Fail. For Seniors and Uppers, Senior preference; Limit of fifteen students
30—3 per section. A seminar in the dynamics of small groups in which the student can

observe and experience how people behave in forming group relationships, how leaders develop and how the attitudes of each individual affect the achievement of the goals of the group. Discussion is concerned with the development of group goals, values, norms, procedure, and leadership. Particular topics may relate to a wide range of human problems that arouse emotional concern in individuals: relations to authority, social roles, personal styles of expression, feelings of hostility, personal success and failure, family relationships, minority problems, and others. Members may experience emotional reactions that they associate with these problems: frustration, anxiety, boredom, elation, excitement, for example. The course aims, in part, to help the student understand the effect of these reactions on the development of the group. Periodically, the student is asked to write papers reviewing tape recordings of the group sessions and his own record of the group experience, interpreting them in the light of theories of group behavior that he discovers in the assigned readings. The purpose of the assigned papers is to help the student find and test concepts with which he can order, interpret, and understand the evidence he has observed.

Religion

All courses are elective.

The courses in religion are intended to introduce students to some of the fundamental religious questions arising out of human experience and to help gain knowledge and understanding of a variety of perspectives and practices in which different religions have sought to answer such questions.

Courses at all levels attempt to develop and combine a capacity for critical analysis and a sensitive appreciation of various beliefs and values. They further seek to point to the possibility and the significance of relating religious experience and insight to the problems of everyday living. The source materials are therefore drawn from secular writing and art forms as well as the forms of expression traditionally viewed as sacred.

20—1 **Introduction to World Religions**
20—3 Open to Juniors and Lower Middlers. The course attempts to help students formulate a comprehensive definition of religion by looking at varieties of man's religious ideas, communities, institutions and experiences, ancient and modern.

21—1 **Covenant and Prophetic Religion: Introduction to the Old Testament**
21—2 Four prepared class periods. Open to Juniors and Lower Middlers. The course explores the idea and the reality of the Covenant Community, both in the Old Testament setting and in contemporary religion, and the related idea and reality of the Prophet and Prophetic Religion, both Biblical and contemporary.

22—2 **Jesus and "The Christ-Event": Introduction to the New Testament**
22—3 Four prepared class periods. Open to Juniors and Lower Middlers. The course focuses on the figure of Jesus, dealing with the historical setting, the nature and characteristics of the Gospels, the experiences of the communities of his followers, and the development of interpretations, both of Jesus and of that continuing experience.

34—1 **The Reformations: Protestant and Catholic**
34—2 Four prepared class periods. Open to Upper Middlers and Seniors. This course
34—3 studies the transition from the Roman Catholic to the Evangelical faith by the great Reformers (Luther, Calvin, Zwingli, Cranmer, etc.) and the new churches to which they gave rise.

40—1 **Religion and the Human Situation: World Religions**
Four prepared class periods. Open to Seniors and Upper Middlers. The course

looks at the variety of religious experience as expressed in some of the living religions of the world.

40—2 Religion and the Human Situation: Religious Problems in Literature
Four prepared class periods. Open to Seniors and Upper Middlers. The course focuses on the nature of man, with special emphasis on a discussion of problems of identity, evil, and community, as expressed in some "recent" literature.

40—3 Religion and the Human Situation: Contemporary Christian Statements
Four prepared class periods. Open to Seniors and Upper Middlers. The course looks at some of the ways Christianity tries to understand and illumine the human situation as seen in the work of some contemporary interpreters.

41—2 The Old Testament
41—3 Four prepared class periods. For Upper Middlers and Seniors. An introductory study of the Old Testament for those who feel they should be, but who are not, knowledgeable about the Old Testament.

42—2 The New Testament
42—3 Four prepared class periods. Open to Upper Middlers and Seniors. An introductory course in the New Testament providing an analysis of the Gospels of Matthew, Mark, Luke, and John; the Letters of Paul; and the Book of Revelation.

43—2 African Religion and Philosophy
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. A lecture and discussion course providing an introduction to some of the important aspects of the life of primary man. The course interprets the experiences of primary man as seen through the activities of traditional African societies.

44—1 Religion in American History and Culture
44—2 Four prepared class periods. Open to Uppers and Seniors. This course is concerned with the planting of the churches from Europe in the new environment of the North American Colonies and the development of their distinctive religious life and institutions.

45—1 Ethics in Contemporary Society
45—2 Four prepared class periods. Open to Upper Middlers and Seniors. The course
45—3 seeks to deal with those contemporary issues that structure student values: education, drugs, war, race, human sexuality, leisure time, and "the feeling of unimportance."

46—1 Existentialism and Philosophy
46—2 Four prepared class periods. Open to Upper Middlers and Seniors. A lecture and discussion course concerned with human values. Readings and discussions deal with the Existential positions, and lectures deal with a survey of Greek philosophical thinking.

47—1 The Western Mind
47—3 Four prepared class periods. Open to Upper Middlers and Seniors. The course is a survey of religious and philosophic ideas in western culture. The ultimate issues of God, man, and the universe are shared by philosophy and religion. The relationship of the two is explored in terms of their unity and their conflict.

48—1 The Philosophy of War and Peace
48—3 Four prepared class periods. Open to Upper Middlers and Seniors. A lecture and discussion course providing a broad body of information on the contemporary concepts regarding human aggression, causes and results of war, and an opportunity to critically evaluate both existing and theoretical models for conflict resolution and to construct personal convictions and concepts regarding these models.

49—3 Religious Figures
Four prepared class periods. Open to Uppers and Seniors. This course examines through the use of biography the deep experiences that influenced and shaped the human life of outstanding religious figures from varying religious communions. Each student studies and presents a biography on the life of some selected religious figure.

50—123 Community Service Independent Project
Pass/Fail. Seniors and Upper Middlers may be permitted to do certain community service projects as an Independent Project. Such projects must be arranged in consultation with the Director of Community Service and are under his supervision. Possible placements: an urban public elementary school, a home for emotionally disturbed children, an inner-city multi-service social agency, etc. Application for this course is done in the same manner as all other Independent Projects and has the same requirements.

Science

The diploma requirement in Science is one year-long course in a laboratory science at the *20*-level or higher.

Juniors and Lower Middlers may pursue a three- or four-year sequence of science courses designed to provide an understanding of science and of scientific methods and thinking as part of a general education. The sequence also provides a sound foundation for later work in college; courses designated by the number *40* are more difficult than the regular ones, and admission is granted only to selected students. Some prepare for the Advanced Placement Examinations and consequently for advanced standing in college. *Science Honors* provides a two-year integrated course for those capable of advanced work in both Physics and Chemistry. Able students who have taken a regular course before their Senior year may prepare for the Advanced Placement Examinations by taking the *45* course for that subject. In addition, the *45* courses provide an opportunity for work to the student who plans further study in a particular field.

In general, students are encouraged to take a variety of courses and to acquire a broad background of knowledge in the different sciences rather than to specialize. For the student with special interests, individual projects are encouraged to the extent that they are consistent with safety, the equipment available, and the capacity of the student.

The *Sciences Courses 10-18* are open to Juniors and Lower Middlers. Able Juniors may elect courses at the *20*-level with permission of the Department Chairman.

Science

10—0 Science
Five periods, three prepared. A laboratory course in beginning physical science using an expanded version of a syllabus called "Introductory Physical Science." Students explore the nature of matter in its solid, liquid, and gaseous forms. Analyses of mixtures and compounds, and a study of radioactivity lead to an atomic concept of matter. Many experiments are quantitative and require careful recording of data, drawing of graphs, and calculations of results.

11—12 Science (T2) (a two-term commitment)
11—23 Four prepared class periods. The course deals with the most stirring and fundamental topics of science from the smallest known particles to the known universe. The text materials of *Harvard Project Physics* are used.

12—2 Science
12—3 Four prepared class periods. A course in earth science with emphasis on geology.

13—2 Astronomy "Earth, the measure of all things. . ."
This course surveys man's evolving views of the planets, the solar system, and the universe around him. Since the 1970's and 1980's can truly be called the years of

planetary exploration, special emphasis is placed on the planets and how they compare to our own Earth. By 1990 scientists will have close-up pictures of all nine planets; this information promises to provide man with new problems for discussion and conjecture about the meaning of life on this planet. The course includes observing sessions at the P.A. Observatory, viewing numerous NASA films and traveling to the Science Museum in Boston.

14—2 **Science**
Four prepared class periods. An introductory survey of the history of scientific thought from the early Greeks to the present century. Biographies of a number of men such as Galileo, Newton, Pasteur, Thompson, Michelson, Rutherford, and others as time permits, will be read and discussed in context with their work and their contribution to the development of science.

15—1 **Oceanography**
15—2 Four prepared class periods. The course deals with the biological, chemical, geological, and physical aspects of ocean environments.

16—1 **Biological Classifications**
16—3 Pass/Fail. Four unprepared class periods. Open to Juniors and Lower Middlers. The course is designed to increase student awareness of the major groups of animals and plants in the Andover area.

17—1 **Man and His Environment**
17—2 Pass/Fail. Four unprepared class periods. Open to Juniors and Lower Middlers. This course is for students with little or no formal training in biology. It is designed to explore the basic question: how can man live in ecological balance with his environment. Readings include such authors as Thoreau, René Dubos, Paul Ehrlich.

18—3 **Science**
Pass/Fail. Preparation for the Physical Science. Four unprepared periods or two prepared periods per week. A course for Juniors or Lowers who are planning to take *Chemistry* or *Physics* the following year. Topics covered include the use of the slide rule, logarithms, exponential notation, significant figures, the metric system and dimensional analysis. There is laboratory work.

25—0 **Physical Science**
Four prepared periods and one unprepared period. Open to Lower Middlers and Upper Middlers (others by permission of the Chairman of the Chemistry Department). The course deals with the fundamental concepts of energy and matter, as they are viewed by modern chemists and physicists.

Biology

30—0 **Biology**
Three prepared periods and one double, unprepared laboratory period. The course stressed the unity of life, rather than the diversity, by emphasizing the function common to all living things. It covers, in plants, animals, and microorganisms the fundamental principles of metabolism, including nutrition, gas exchange, transport, excretion, and homeostasis; responsiveness and coordination; reproduction, genetics, and development; the principles and history of evolution; and the principles of ecology.

The laboratory work includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. It requires careful observation, mastery of techniques, and accurate recording of results. Several laboratory periods are set aside for field trips featuring ecology and conservation. There is opportunity for work on individual laboratory projects.

43—1 **Biology**
43—3 Prerequisite: *Biology 30* or its equivalent. Selected topics are presented in an inquiry-oriented manner involving considerable laboratory work. Many of the labs are open-ended leaving the students to work out the procedures and draw their own conclusions.

44—2 Biology
Prerequisite: *Biology 30* or its equivalent. Selected advanced level topics dealing with human physiology. Designed especially for students with an interest in pre-med study, this course investigates areas such as human digestion, circulation, respiration, and endocrinology.

45—23 Biology (T2) (a two-term commitment)
Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Four prepared class periods and one double, unprepared laboratory period. In addition to a review of basic biology, new material is presented as the course progresses. The combination of review and new work prepares students for the Advanced Placement Examination of the College Entrance Examination Board.

Chemistry

20—0 Chemistry
Prerequisite: Completion of *Mathematics 13* or the equivalent. For Lower Middlers and Upper Middlers. Three prepared periods and one unprepared, double laboratory period. The course includes a systematic study of matter and the changes it undergoes. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 Chemistry
Prerequisite: Completion of *Mathematics 26* or the equivalent. Three prepared periods and one unprepared, double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 20*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers.

41—0 Chemistry
For Seniors (Upper Middlers with permission of the Department Chairman). Four prepared periods and one unprepared, double laboratory period. This course treats topics from elementary chemistry in greater depth than *Chemistry 30*—roughly equivalent to the level of a first-year college course—but at a slower pace. It does not cover enough to prepare for the Advanced Placement Examination in Chemistry.

43—2 Chemistry
Prerequisite: Completion of *Chemistry 20* or the equivalent. Three prepared periods and two unprepared, double laboratory periods. The course is designed for students who wish to continue the study of chemistry, but is not intended as preparation for the Advanced Placement Examination in Chemistry. The course involves an intensive study of a few selected topics in organic chemistry and bio-chemistry. Laboratory work included organic synthesis, taking and interpretation of infrared spectra.

44—1 Chemistry
Prerequisite: Completion of *Chemistry 20* or the equivalent. Three prepared class periods and two unprepared, double laboratory periods. For students who wish to study chemistry further without trying to achieve advanced placement. This course is an introduction to organic chemistry, with emphasis on stereochemistry, or molecular shapes.

45—23 Chemistry (T2) (a two-term commitment)
Prerequisite: *Chemistry 20* or *Chemistry 30* completed with distinction. Four prepared periods and one unprepared, double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry.

48—0 Chemistry
Prerequisite: One year of Physics. Three prepared periods for recitation and two unprepared, double laboratory periods. This course is open to a limited number

of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry.

Physics

21—0 Physics
Five class periods, one unprepared. An introductory course designed for students who have had only one year of algebra. It uses the materials developed by the Harvard Project Physics Group. It is less mathematically oriented than *Physics 25*. Not open to students who have had *Science 11*. They should take *Physics 25* or *30*.

25—0 Physics
Five class periods, one unprepared. Open to Lower Middlers, Upper Middlers, and Seniors. An introductory course in the basic concepts of physics with emphasis on relativity and modern physics. A somewhat less rigorous course than *Physics 30*, it is designed for students who have had only one year of algebra and one year of geometry. Text: *Mainstream of Physics* by Bieser.

30—1 Physics
Five class periods, one unprepared. Designed for students with demonstrated ability in mathematics and science. *Physics 30-1* is a prerequisite for either *Physics 30-2 3*(T2). Text: *College Physics*, by Miller. A study of mechanics, primarily classical mechanics, in some depth.

30—2 3 Physics (T2) (a two-term commitment)
Prerequisite: *Physics 30-1*. Five class periods, one unprepared. Winter Term: Wave motions, heat, and kinetic molecular theory. A study of wave motions includes sound and geometric and physical optics. Spring Term: Electricity, magnetism, electronics, atomic and nuclear physics.

40—0 Physics
Four prepared class periods and one unprepared double, laboratory period. An advanced course open upon invitation of the department to a small group of students who are concurrently taking calculus and who have not previously studied elementary physics. A previous course in chemistry, though not required, is advisable. Lectures, recitations, and laboratory work are planned to prepare students to pass the Advanced Placement Examination in Physics of the College Entrance Examination Board.

45—12 Physics (T2) (a two-term commitment)
Five prepared class periods. Open to students who have completed a year of Physics and who have taken, or who are taking concurrently, a course in Calculus. The Fall Term course is essentially a course in modern Physics. Part of the Winter Term is used in reviewing for the advanced placement examination. Some advanced laboratory work is done during the Fall Term.

50—3 Relativity and Quantum Mechanics
Prerequisites: *Physics 30* and *Math 52*. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Special Science Courses

25—3 Astronomy—Planets, Stars and Galaxies
This course is equivalent to a non-technical introductory college course in astronomy. Though a full spectrum of topics are discussed, special subjects of current interest is emphasized; these include constellation identification, the planet Mars, other solar systems, U.F.O.'s and life beyond the Earth. The P.A. telescopes are available for student use and classroom work is supplemented by numerous slide presentations and films. This course is open to anyone interested in general astronomy. Enrollment is limited.

30—1 Animal Behavior

30—3 Prerequisite: one year of Biology. Limit of sixteen students. Preference given to seniors. Three prepared class periods and one unprepared double laboratory period. The course is designed to familiarize the student with the basic principles of animal behavior. The topics which receive the greatest emphasis are: territoriality, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Readings from *On Aggression, The Territorial Imperative,* and "Scientific American" reprints are included.

31—1 Ecology

31—3 Prerequisite: one year of Biology. Limit of sixteen students. Preference given to seniors. Three prepared class periods and one double, unprepared laboratory period. An introduction to ecology with early emphasis on the concepts of the ecosystem, energy flow, material cycling, succession, and relations within and between populations. These fundamentals are then applied to problems of human ecology such as overpopulation and air and water pollution. In the laboratory, relationships in communities are investigated. Various pollutants and their effects upon the environment are also tested.

32—123 Ecology

Prerequisite: one year of Biology. Three prepared class periods and one double, unprepared laboratory period. A study of living organisms in relation to their surrounding environment. Fall Term: PLANT ECOLOGY; Winter Term: ANIMAL ECOLOGY; Spring Term: MAN'S ROLE IN THE ENVIRONMENT.

31—1 Electronics

Five class periods, one unprepared. For those students interested in electronics who do not have room for a major course in physics in their course program. It covers basic electricity and magnetism circuitry, diodes, triodes, transistors, alternating current, and whatever else time allows.

34—3 Geology

Three prepared class periods and one double, unprepared laboratory period. The course prepares students to interpret natural environments and to evaluate the physical and chemical processes acting in our own. Field trips to local sites. Prerequisites: successful completion of or current enrollment in a *30*-level mathematics course and a laboratory course in science.

40—3 Astronomy

Four prepared class periods. Introductory College Astronomy—the Solar System. This course is equivalent to a one semester college astronomy course. The extent of man's knowledge about the solar system is studied and a fair amount of time is spent on modern astrophysics and analytic astronomy. Texts: *Exploration of the Universe* by George Abell, *Frontiers in Astronomy,* readings from "Scientific American". Prerequisites: One full year of Physics or permission of the instructor, and Algebra and Geometry. (Not offered in 1974-75)

41—3 Astronomy

Prerequisite: one year of Physics or permission of the instructor. Uppers and Seniors only. "The universe from black hole to quasar." This course is a sequel to *Astronomy 40* (though *Astronomy 40* is not a prerequisite). Some of the most intriguing and bizarre discoveries in recent years have occurred in astronomy. The course investigates the sideral and galactic universe with the aid of physics and mathematics, giving special concern to pulsars, relativity, stellar evolution, and the "Big Bang" theory of the beginning of the universe.

30—0 Science Honors

40—0 Five prepared class periods or the equivalent. A two-year sequence, open, upon invitation of the instructor, to a small group of Upper Middlers who will complete a year of analytic geometry and the calculus before graduation and who show promise of unusual capacity in science and mathematics. The subject matter includes chemistry and physics, both of them carried well beyond the elementary level in text and laboratory work. It is expected that the ablest students in the sequence will be prepared to pass both the Physics and Chemistry Advanced Placement Examinations of the College Entrance Examination Board.

Science Honors 30 fills the diploma requirement in laboratory science for students who find it inadvisable for any reason to continue to *Science Honors 40.*

ANDOVER



1975-76 Catalog

At the time of the May, 1975 printing, some information for 1975-76 was not available. Accordingly, we have used 1974-75 data where it was necessary.



1975-76 Catalog

Published by Phillips Academy
Andover, Massachusetts

ANDOVER

calendar 75-76

Fall Term

September 20, Saturday
New Students Arrive

September 22, Monday
Old Students Arrive

September 25, Thursday
Classes Begin

November 8, Saturday
Andover-Exeter Football

November 27, Thursday
Thanksgiving Day—No Classes

December 6, Saturday
Classes End for Fall Term

December 8, Monday
Exams Begin

December 11, Thursday
Exams End—Vacation Begins

Winter Term

January 5, Monday
Students Return by 8:00 P.M.

January 6, Tuesday
Classes Begin

March 10, Wednesday
Classes End

March 11, Thursday
Exams Begin

March 13, Saturday
Exams End—Vacation Begins

Spring Term

March 29, Monday
Students Return by 8:00 P.M

March 30, Tuesday
Classes Begin

May 31, Monday
Memorial Day—No Classes

June 3, Thursday
Classes End

June 4, Friday
Exams Begin

June 9, Wednesday
Exams End

June 10, Thursday
Commencement

contents

5 INTRODUCTION TO ANDOVER
6 History
7 Faculty and Students
8 Curriculum and Activities
9 The Library
9 Complementary Programs
10 The Andover Summer Session
11 Activities
12 Andover Life
12 The School Day
14 The Clusters
15 Counseling and Discipline
15 The Work Program

17 COURSES
17 The Arts
17 The Addison Gallery
18 Filmmaking
18 Theatre
19 Music
20 The Classics
21 English
23 History and Social Science
24 Mathematics
25 Modern Foreign Languages
26 French
27 German
27 Russian
28 Spanish
28 Religion
29 Science
29 Archaeology
30 Biology
32 Chemistry
33 Physics
33 Psychology

35 ATHLETICS

39 HEALTH CARE

39 TUITION
41 Other Expenses

43 ADMISSIONS
43 Application Procedure
43 The four steps for Application
43 Secondary School Admissions Test
44 Senior Class Candidates
44 Whom to Contact at Andover
45 Early Decision

45 Financial Aid

46 Alumni Representatives
46 Admissions Interview Schedule

57 TRUSTEES

59 ADMINISTRATION AND FACULTY – 1974-75

71 ANDOVER STUDENTS – 1974-75

89 STATISTICAL INFORMATION
89 Geographical Distribution
90 College Counseling at Andover
91 College Admissions for the Class of 1974

93 MAPS
93 Campus Map
94 Regional Map

97 PRELIMINARY APPLICATION FORM



By American standards Phillips Academy – colloquially referred to as "Andover" in our day – is an ancient school but the purposes for which it was founded during the American Revolution make as much sense now as they did almost two hundred years ago. We believe in rationality with no less confidence than did our eighteenth century forebears, and we feel that any school which helps students joyfully to use their minds has an important place in American education. "Using one's mind" need not be a dry-as-dust thing: clear thinking opens one's eyes to all manners and kinds of living.

Many label schools such as Andover "preparatory" schools. This is only partly true. While we do "prepare" individuals to enter college, and life beyond, we are also concerned with an individual's life here and now, in the kind of person that individual is, in her or his decency, happiness and character.

No educational institution ever stands still. Andover, like all schools, is in constant movement and change, endeavoring to accommodate rationally to a culture which itself is perpetually in movement. The lively and demanding task for this community, students and faculty, is to make these accomodations wise, and constructive.

Theodore R. Sizer

introduction to Andover



Phillips Academy is situated at Andover, in the County of Essex, Massachusetts. The Constitution and original deed of gift of the Academy were signed April 21, 1778, by Esquire Samuel Phillips of the north parish of Andover and his brother, John Phillips, LL.D., of Exeter, New Hampshire, in the presence of Samuel Phillips, Jr. (then but twenty-six years old), afterward judge of the Court of Common Pleas for Essex County, president of the Massachusetts Senate and lieutenant governor of the Commonwealth.

Our constitution, written by Samuel Phillips, Jr., with the advice and aid of his friend Eliphalet Pearson, who became first Master, shaped the ideals of the school then as now:

> A serious consideration of the premises, and an observation of the growing neglect of youth, have excited in us a painful anxiety for the event, and determined us to make, in the following Conveyance, a humble dedication to our Heavenly Benefactor of the ability, wherewith he hath blessed us, to lay the foundation of a public free School or Academy for the purpose of instructing Youth, not only in English and Latin Grammar, Writing, Arithmetic, and those Sciences, wherein they are commonly taught, but more especially to learn them the great end and real business of living...

The founders appealed to the faculty:

> But above all, it is expected that the Master's attention to the disposition of the minds and morals of the youth under his charge will exceed every other care; well considering that, though goodness without knowledge (as it respects others) is weak and feeble, yet knowledge without goodness is dangerous, and that both united form the noblest character, and lay the surest foundation of usefulness to mankind...

And the founders spoke early of the diversity desired in the student body:

> This Seminary shall be ever equally open to youth of requisite qualifications from every quarter.

History

Phillips Academy opened for instruction April 30, 1778, in a building which had earlier been used as a carpenter's shop. From the beginning under the leadership of Eliphalet Pearson, the first principal, the school gained in reputation, attendance and number of teachers. On January 28, 1818, during his term as principal, the schoolhouse burned and a new brick Academy designed by the famous architect Charles Bulfinch was erected within a year. This "classic hall," described in Oliver Wendell Holmes's centennial poem, "The School-Boy," and now called Bulfinch Hall, is still used by the English Department.

The modern period of the school's history commenced in 1873 with the election of Cecil F.P. Bancroft,



a man of foresight, vision, patience and shrewd discrimination, who was principal until his death in 1901. Under Dr. Bancroft's administration attendance increased from 262 to over 400 pupils.

Under Dr. Alfred E. Stearns the Academy acquired the buildings and land of the Andover Theological Seminary and in the 1920's and 1930's took its present form. During the headmasterships of Dr. Claude M. Fuess and John M. Kemper, the student body, the faculty, the physical plant and the endowment continued to grow. At the same time continual changes in educational practice and theory enabled Andover to maintain its leadership in secondary school education.

The present Headmaster, Theodore R. Sizer, formerly Dean of the Harvard Graduate School of Education, assumed his duties on July 1, 1972. In October of 1972 the Trustees of the school announced the incorporation of Abbot Academy into Phillips Academy. The combined facilities of Andover and Abbot now include almost 200 buildings on over 400 acres.

Andover is greatly enriched by the merger with Abbot. Abbot Academy was the first incorporated girls' school in New England and brings to Andover a long tradition of academic excellence for women, extending back to 1829. Sarah Abbot and Samuel Phillips, Jr. were of the same family, and the two schools have worked closely together throughout their histories. Several years of cross-enrollment in academic courses and coordination of extra-curricular activities preceded the merger.

Faculty and Students

At the heart of Andover life is the insistence on sound academic teaching, hard work and the mastery of intellectual disciplines and skills. The classroom comes first. But the Andover faculty member is more than a skilled classroom teacher. It is the ability to combine classroom teaching with the role of leader, counselor and friend that makes the Andover instructor unique. Many of the 150 teachers also coach, serve as resident house counselors for five to twenty students, act as advisors for student extra-curricular activities and serve on faculty-student committees. Faculty members are also active in school policy-making and many have achieved distinction in their professional fields.

Andover has always tried to make its student body as diversified, as able and as democratically chosen as possible. Capable applicants from minority groups and from every economic and social background are urged to



apply to the school. A good example of a minority group in the school community is the Afro-Latino-American Society. Eager to improve minority life at Andover, the Afro-Latino-American Society has its own meeting room that serves as a cultural center for minority students. The society sponsors seminars, speakers, a quarterly publication, trips and entertainment. It also actively recruits new minority students.

Andover students have only this in common: they wish to learn. Few if any other schools in the United States, public or private, have such diverse and able young people. In the school year 1973-74 the school, numbering 1147, included 39 black students, 23 from foreign countries and representatives of 37 states. Over 300



students received financial aid and travel grants.

Candidates are admitted annually to each of the four classes in approximately the following numbers: ninth grade (Junior), 122; tenth grade (Lower Middle), 148; eleventh grade (Upper Middle), 83; twelfth grade (Senior and Postgraduate), 35. Andover encourages applicants for one, two, and three year programs, as well as the full four. Andover admits students of any race, color, or creed to all the rights, privileges, programs, and activities generally accorded, or made available. The school does not discriminate in the administration of its educational policies, scholarships, and loan programs, and athletic and other school administered programs.

CURRICULUM AND ACTIVITIES

The curriculum combines a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual. Students' placement may be independent of age or grade. Students are encouraged to progress at a rate appropriate to their ability and ambition, and through advanced placement at entrance or accelerated courses, many students are able to fulfill requirements ahead of the normal year, enabling them to take college-level courses or other electives.

Andover operates on a trimester system which provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects. Classroom groups are small enough to permit individual attention: 126 teaching faculty members make 12 students the average size of a class. The curriculum is described in detail in the *Course of Study,* which will be sent to each preliminary applicant and to others who request it. Students may select their instructors, class times and sections during Arena Day which precedes each trimester.

The Library

At the center of Andover's intellectual life is the 100,000 volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually. The Copley Wing is used for reserved books and provides carrels for individual studying.

The Library subscribes to over 250 American and foreign periodicals and 11 daily papers from cities throughout the country. A microfilm file of the New York Times is available. Particular Library treasures are an original elephant folio of *Audubon's Birds of America* and the papers and books of Oliver Wendell Holmes. The science and mathematics departments have working libraries in their own buildings.

Short Term Institutes

The Complementary Schools Project is the embodiment of an idea of the Headmaster, first expressed in his recent book, *Places for Learning, Places for Joy*. Dr. Sizer believes that no single setting is ideal for all kinds of learning and that at times today's students may need new educational experiences in different places and suited to their own needs. Under the Complementary Schools Project the Ford Foundation has granted Phillips Academy funds for a two-year study of possible coordinate relationships between public and private education.

The Short Term Institutes, one approach of the Complementary Schools Project, bring day school students and teachers to Andover for a 4-6 week intensive academic program in one subject area. The result of broad consultation with school and government officials and professional educators across the country, the Short Term Institutes offer both the opportunities found only in a residential setting and intensive specialized courses. About twenty students in each Institute study under an Andover faculty member, live together in a dormitory complex and participate in a variety of cultural and social programs at Andover and in metropolitan Boston. Further information can be obtained by writing Andover Short Term Institutes, Phillips Academy, Andover, Mass. 01810.

School Year Abroad

School Year Abroad conducts programs for upperclassmen in France, Spain and Germany. Phillips Exeter Academy, Exeter, New Hampshire and St. Paul's School, Concord, New Hampshire are sponsors with Andover of this opportunity to spend a full academic year or a portion of a year learning the language and the customs of another people. Students reside with French, German or



Spanish families, carry a full academic program (permitting graduation from Phillips Academy with their own class) and travel throughout the country on weekends and school holidays. Qualified Upper Middlers, Seniors, (who will have completed the American History and laboratory sciences requirements) and postgraduates are eligible for School Year Abroad. A catalog can be obtained by writing School Year Abroad, Samuel Phillips Hall, Phillips Academy, Andover, Mass. 01810.

Other Complementary Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Students in the Man and Society course may spend a winter term of work and study in Boston or Mexico.

In addition to school-sponsored programs, many Seniors arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.

The New School, begun during the 1970-71 school year, is a student-run organization which offers non-credit courses ranging from macrame to karate. The idea for the New School evolved as a way of combining extra-curricular activities with learning.

The Andover Summer Session

The Summer Session makes use of all the school's facilities and is open to regularly enrolled Andover students and to able students from other public and private schools. Its purpose is to provide a summer experience for boys and girls of high school age that will deepen and extend their intellectual, aesthetic and moral interests. Courses in all subjects and at all levels demand hard work – harder work than most students have ever before experienced. Many courses offer subjects or approaches rarely found in the conventional secondary school curriculum; all courses proceed rapidly and probe deeply because the students are competent and highly motivated. The advanced courses are conducted at the advanced placement college level.

The faculty and staff are an expert and diverse group of men and women that numbered 144 in 1973. Many of the teachers come from the Andover faculty, the rest from other schools and from colleges. The Summer Session admits boys and girls who have done well



academically and who have completed the 9th, 10th, 11th or 12th grades. A catalog can be obtained by writing The Andover Summer Session, Phillips Academy, Andover, Mass. 01810.

Activities

Another important aspect of education at Andover are extra-curricular activities. Some are course-related, such as the Computer Club, the Latin Play and Science Experimenters. Many are not; these include the various school publications, the political organizations and the radio station. Other active groups are the Pre-Med Club, the Student-Alumni Association, the Chess Club, the Coin Club, the Stamp Club, the Sailing Club, and Philo, the debating society. Members of the Andover Tutorial Program are students who give tutorial help to fellow students who are having academic problems, mainly in math, science and foreign languages.

Andover also believes in the importance of off-campus experiences that give students a change of pace, contribute to their awareness of social problems and invite them to meet the needs of individuals and groups outside the school. The Community Service Program arranges placement in area hospitals, city or suburban elementary schools, youth centers, a school for emotionally disturbed children and other agencies. Students participate in their own free time, as an activity in lieu of athletics or as an independent study project. One student may tutor an hour a week in a nearby elementary school; another may spend four hours every weekend in a Lawrence hospital or help to bring a dozen fourth graders from South Lawrence to Phillips Academy for weekly recreation or classroom enrichment. Another boy or girl may be intensely involved in a bilingual classroom in Lawrence or with an emotionally disturbed child at St. Ann's Home. Over one hundred students were involved in community service during 1973-74.

The Solid Waste Action Group collects newspapers magazines, cans and glass for recycling. In 1973-74 SWAG earned $883.00 by collecting over 33 tons of newspapers, 235 bags of cans and five and a half tons of glass.

Upperclassmen may elect for one term to be in-







volved in the Activities Program instead of the usual afternoon athletic activities. Some popular choices have been ceramics, chess, music, photography and woodworking. Other groups of students have worked as a stage crew or explored the dynamics of "decision making."

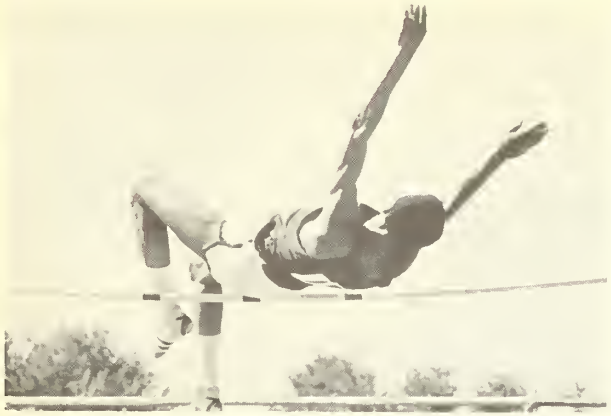
ANDOVER LIFE

Andover is a large and active place which constantly generates the feeling that "things are happening." Course work is fast-paced and involves about twenty-five hours of outside preparation each week. In addition there are approximately six hours of athletics and, for Uppers and Lowers, three hours of the school work program per week. Most students also become much involved in extra-curricular activities and social events. Decisions about the use of one's time are largely left to the judgment of the individual, for the school encourages independence and personal responsibility. There are no study halls, and students may use their free time as they wish.

Andover is a thirty-minutes' drive from Boston and Cambridge, and buses run hourly between Andover and downtown Boston. Students have easy access to the historical, cultural and entertainment offerings in the greater Boston area, and to Logan Airport for vacation flights home. Frequent trips are scheduled to the Boston Symphony, other concerts, movies, plays and sports events. Most students are eligible to take a day excuse each week; after the first two weeks of the school year overnight excuses are permitted. Seniors may take two, and underclassmen one, extended weekend excuse in the winter and spring terms.

The School Day

There are five class periods of forty-five minutes each in the morning, and another two in the late afternoon. An individual is likely to have two morning periods and one afternoon period free each day, though the number and time of free periods depend on the scheduling of courses.



> There is a constant learning experience going on just by living at P.A., away from home and among such individualistic people.
> —Diana Van Anda '75

Athletics or an afternoon activity usually takes place after lunch until about 3:30 on Monday, Tuesday, Thursday and Friday. On Wednesday and Saturday varsity and junior varsity teams often have outside competitions. After dinner there is time for extra-curricular activities and recreation. At 8:00 all underclassmen must be back in their dormitories or in the library, language lab, computer room, or audio-visual center. Seniors need not be back until 11:00. Bed hours are regulated for Juniors.

Wednesdays and Saturdays are half holidays with no afternoon appointments. On alternate Saturdays there are no morning classes. Sunday is totally free. On these days there is time for independent study, for special projects, informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Movies, dances, concerts, plays and other social events take place Saturday evenings. Social events during the week are limited by the demands of the academic program, but the weekends on campus abound with dances, concerts, movies, plays and informal activities.





“For the most part teachers are open, friendly and able to relax casually with students—even eat meals with students!!
—George Kirchwey ’75”

Meals are served in Commons, the central dining hall composed of four dining rooms and two serving areas, and in a separate dining hall serving the Abbot Cluster. During the week breakfast is served from 7:15 to 8:15, lunch from 12:30 to 1:15 and dinner from 5:30 to 6:15; on Sunday the first two meals are served somewhat later. While meals are not required and there is a snack bar on the campus, most students find it convenient and economical to eat regularly at one of these dining halls.

The Clusters

The dormitories and houses in which boarding students at Andover live are grouped into six units called “clusters” which serve as administrative and social subdivisions of the school. The cluster system is the heart of Andover’s living arrangements. The purpose of the cluster is to create the personal atmosphere of a small community in which everyone knows everyone else and people do things together. It brings the advantages of a small school to an institution that already has the advantages of size. The clusters, each of about 170 students from all classes, have considerable independence. Teachers and students together manage their own affairs under the leadership of the Cluster Dean. The clusters are the focus of a variety of activities such as lectures, seminars, off-campus service projects, social events and intra-mural athletics.

Dormitory life is for many students one of the most valuable aspects of their time at Andover. Dormitories and the smaller houses adjoin the apartments of house counselors and their families and although these buildings are somewhat varied in size, all are small enough to encourage close relationships among students and between student and house counselor. The person who lives in the next room may well come from a very different background or part of the world. Students generally re-

main in the same cluster during their years at Andover and form continuing relationships with the faculty and other students there.

Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has, or they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that freedom for the individual can be achieved only within a social order. The school tries to keep rules to a minimum, and they are reviewed annually by a committee of students and faculty.

Each student has a faculty counselor or houseparent who lives with his or her family in the dormitory and who is available for advice and assistance. Parents can expect to hear from the house counselor at regular intervals, as this faculty member works closely with students in the dormitory on both the personal and academic level. Parents are encouraged to turn to the house counselor for information regarding a student's progress.

Each Cluster Dean supplements the work of the house counselor and is available to students and parents for information and counsel. The academic advisors help students in the cluster plan their academic programs. Full-time Co-Directors of College Placement and their staff assist all Seniors with their future plans.

Discipline is handled at the cluster level and may involve the Cluster Dean, house counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of the school community and continued infractions that indicate an unwillingness to come to terms with the demands of the school all render a student liable to dismissal. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds.

Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission. Boys and girls who feel they could not live happily with these rules should not apply for admission.

The Work Program

The work program, in which every Lower and Upper takes part, is designed to develop a sense of community responsibility for the daily operation of the school. It assists the school in reducing its expenses and makes it possible to lower student fees. Students, working about three hours per week, share the jobs of keeping the campus free of litter, shoveling snow, returning books to the library stacks, operating audio-visual equipment, serving as office helpers, messengers and laboratory assistants and performing other essential tasks. In addition all students are responsible for the daily care of dormitories.

The Clusters take turns each week working in the dining hall, Seniors and Uppers serving as overseers. Seniors have other supervisory roles: proctoring in dormitories and, as members of Blue Key, organizing the welcome and orientation of new students in the fall.

“

Andover is a complete school. It is big enough so one can meet many different types of people, but small enough so one doesn't feel lost. For the years you attend the school it is your life. Here, you meet your true friends and have some of the best times of your lives. Diversity is perhaps the best element of the school. There are countless things to do if you look.
—Mark Forsyth '75

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THE ARTS

The Arts and Communications Center never seems to shut down. Of course there are many studio classes going on during the day and the audio-visual facilities are used both day and evening, but aside from regular students there are bottle-cutters, hi-fi cabinet makers, rabbit-hutch designers and many other craft-conscious young people working almost every evening of the school year. Members of the Art Department welcome this kind of activity as well as that related to courses, and faculty members are on hand each evening to encourage the idea that whether it's sculpture or bicycle repair, the Arts Center is the place to go.

In recent years art facilities for ceramics, painting and printmaking have expanded to the former Abbot campus. Filmmaking and video have their own small building. The number of students involved with the visual arts has increased enormously in the last decade, and the projects undertaken have varied from traditional media to the design of toys, small kinetic sculptures that crawl around the room, puppet-making, rear-projection events and applied video. Last year the architecture class designed and built a playground for a local nursery school. The year before it built a twenty-foot practice climbing tower for the Search and Rescue group. Superb facilities—fully-equipped wood and metal shops, two complete darkrooms, print-making equipment, several painting studios—enable students to carry out such projects. The kinetics studio is a maze of wires, gears, and motors. Ceramics has the use of several kinds of kilns: electric, gas-reduction, wet-firing, and a salt-kiln now under construction. The photography program, probably our most popular art activity, includes studio photography, documentary photography, and photographic silkscreen. "Eidolons," which means "images," is the school's magazine of photographic communication and is run entirely by students. It publishes each year work by the many photographers in the school community.

Andover attempts to balance informal problem-oriented courses like Visual Studies and the more adventuresome independent projects of advanced courses. Four years of formal courses are offered, but students are welcome at the Art Center just to have some fun and learn how to put something together. A partial list of courses suggests the range of the Art Department: Ceramics, Documentary Photography, Painting, Print Shop, Architecture, Art History, Filmmaking, Sculpture, Kinetics, Three-dimensional Design, Drawing (including Life Drawing).

The sculpture courtyard, located just outside the Arts Center, is gradually filling with welded sculptures—one of which is fifteen feet tall. Last year the film class cooperated in scripting and filming a version of Salinger's *Catcher in the Rye.* Student graphics have been accepted for publication in the *Andover Review,* Phillips Academy's new publication on secondary education. One of the most exciting recent events on campus was the Bradley Arts Festival. Students from fourteen schools congregated for a weekend and exhibited art work, performed dramatic and musical pieces, and camped out in the Cochran Sanctuary in improvised structures brought along and erected for the occasion.

Addison Gallery

The Addison Gallery of American Art, which now includes nearly 2,000 acquisitions, is recognized as one of the outstanding specialized collections in the country. Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LaFarge, Ryder, Twachtman and Whistler. The early part of the



present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keefe, Pollack, Shahn, Wyeth and others. This year the Gallery has instituted a set of seminars, organized by students, which brings artists on campus to meet with young people interested in art.

Filmmaking

Filmmaking and videotaping are important activities at Andover. There are courses that study "The Western," "The Gangster Movie" and that deal with European films or the American Underground. In Film Study and Literature and the Movies students write papers, do video exercises in imitation of film techniques and examine movies in the context of literary and artistic traditions.

In the two sections of Filmmaking, individual students make movies: sketches of a roommate, short documentaries, personal fantasies. There are also longer, more elaborate story movies, sometimes requiring an entire class to handle the technical difficulties of sound, lighting and acting. And there are projects, done primarily on videotape, which help other people in the community: studies of a dancer practicing, of a teacher doing an experiment, of an athlete working on his technique in the hurdles.

Theatre

Courses in theatrical production, a series of term-contained courses in directing, acting, stage lighting and design, and a year-long major, Plays in Production, in which students become involved with all areas of production on the amateur stage, are very popular. The courses combine classroom and workshop sessions, students working out practical theatrical problems together under the guidance of the instructor. At Andover it's a rare week that doesn't see two or three plays in production, many of them written, directed or produced by students. Students may do theatrical work as an extra-curricular activity; or they may join one or more of the theatre courses in directing, scene design and stage lighting, acting and production.

The main stage in George Washington Hall plays to audiences of over one thousand. It is a flexible, professionally equipped proscenium stage recently remodeled and modernized, whose dramatic and technical possibilities are vast: it is complete with a full fly system, accommodation for innumerable lighting instruments and an elevator/pit. Adjoining the stage are a fully equipped scenery workshop (where sets are constructed by students and faculty), dressing and make-up rooms, and storage areas. Each major show uses a full stage crew, membership in which is open to students as an alternative to athletics. In addition to innumerable lesser efforts, the main stage is the location of three or more major productions each year: comedy, drama, a Shakespearean play, a musical comedy (in collaboration with the Department of Music). The versatility of the main stage has encouraged many demanding productions; among recent performances are *Rosencrantz and Guildenstern Are Dead, Richard III, Antigone, The Madwoman of Chaillot, A Man for All Seasons, Guys and Dolls, Kiss Me Kate,* and *A Cry of Players.*

The Drama Lab, where some of the most exciting and innovative work goes on, is an intricate arena/workshop theatre with excellent lighting facilities, suitable for audiences of less than 100. The major main stage plays are usually directed by a member of the faculty; the Drama Lab provides opportunity for students to direct plays themselves and to experiment with dramatic styles. The Drama Lab will take nearly any shape the

imagination of the director and cast can conjure up. Here some twenty or more plays can be produced each year, representing a range of theatrical types and styles. A sample from the past few years includes *Lysistrata, The Glass Menagerie, Everyman, America Hurrah, The Homecoming, The American Dream, The Three-Penny Opera* and *No Exit.* The school has other potential acting areas, indoors and out, including the steps of Samuel Phillips Hall and the green lawns of the campus which are often used by imaginative directors.

Music

Graves Hall, a huge old three-storied Victorian brick building complete with turrets, heraldry, love seats and waste space, is one of the oldest classroom buildings on the campus. Recently renovated and reconstructed, it serves as a fine music building. It has two large rehearsal halls, one for the Concert Band and one for the String Orchestra, and many individual practice and ensemble rooms, each containing a practice piano, one music classroom and three teaching studios; it also houses the finest musical instruments and stereo equipment. The Music Department has a large and up-to-date record lending library and listening room. A short distance away is Cochran Chapel, where the Chorus has a fully equipped rehearsal room with a library of music literature.

The Music Department faculty consists of four full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, woodwinds and percussion.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He may also, for a nominal fee, study privately. He may take the beginner's course Music Perception, offered each term. A more advanced four-part course, Theory of Music, runs in sequence throughout the year.

For beginners and advanced organ students Andover makes four instruments available. In the main sanctuary of the chapel is the Casavant Organ. The chorus rehearsal room has a practice pipe organ, and the Sylvia Kemper Memorial Chapel has a fine reed organ. The Meeting Room of George Washington Hall has a Hammond organ.



For the student who is sufficiently advanced, Andover has many musical organizations in which to play or sing, either on a credit or a non-credit basis. Small ensembles of strings, woodwinds, brass and madrigal singers, as well as a large jazz band made up of players from the Band and Orchestra, rehearse and perform many times during the year. The Mixed Chorus combines with other schools in presenting major works. The Academy Singers, for those who cannot make a full-time commitment to the Chorus but who would like to sing, is open to students, faculty, staff and their families and performs with the Chorus about once a term. The Fidelio Society is made up of outstanding singers from the Mixed Chorus. The Chamber Music Society plays for its own enjoyment and also gives school recitals. The Orchestra plays often in concert and appears with the Chorus several times a year as accompanist. In the spring as a pit orchestra it accompanies the annual Broadway musical. The Jazz Band is open to any qualified instrumentalist or vocalist and plays all styles of music written for stage band. The Pep Band plays for football games, and the Concert Band gives formal concerts at Andover and neighboring schools.

The Bell Tower, a focal point of the main campus, houses a thirty-seven-carillon that is played by the stu-

dent who wins the Fuller Music Prize, an award of $350 a year. Duties consist of playing the carillon a number of times each week and on special occasions. In the Music Building there is a duplicate practice keyboard of the carillon for those who want to learn to play.

The school is so close to Boston that advanced students may study privately with members of the Boston Symphony Orchestra, instructors at the New England Conservatory of Music or other specialists in the Boston area. Also in Boston is Berklee College of Music, one of the outstanding centers in the United States for jazz instruction. Andover students have many opportunities to attend musical performances either at the school or in the city: the Boston Symphony Orchestra, the Metropolitan Opera on tour, classical concerts, jazz workshops and rock concerts.



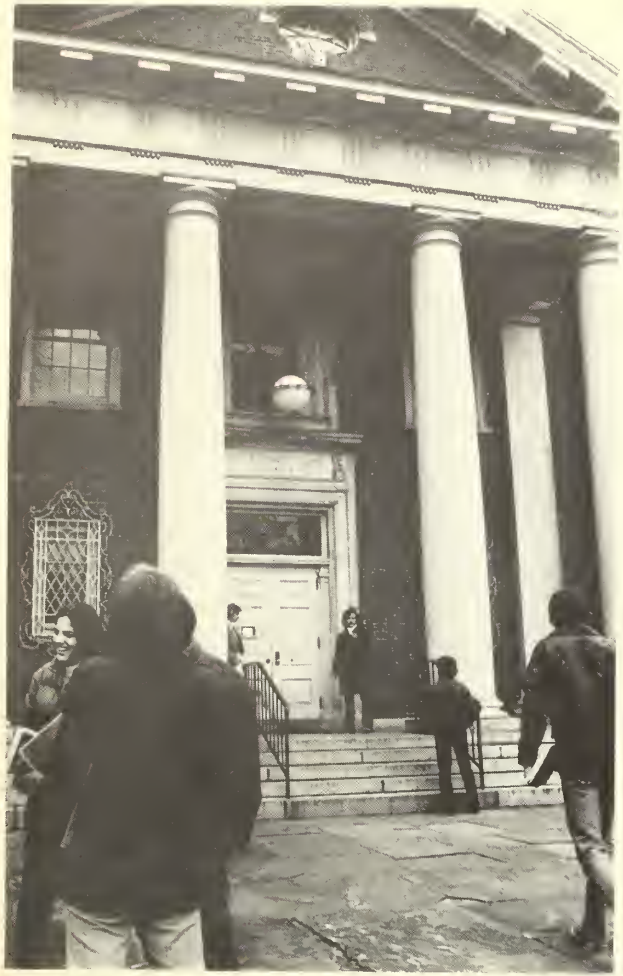
THE CLASSICS

The study of Greek and Latin challenges students to examine evidence and to develop powers of independent thought and the awareness that the social, political and economic problems that confront us today have appeared many times in human history. Through the study of classical languages, students establish a firm basis for humanistic studies in their own language and literature. By reading ancient authors they may learn what constitutes a "classic" and what the classics mean today.

Each year students produce a Roman comedy. These have usually been plays by Plautus, and in recent years have included *Captivi* (The Prisoners), *Mostellaria* (The Haunted House), *Menaechmi* (The Two Brothers), *Curculio* (The Parasite), *Pseudolus* (The Crafty Slave), and *Rudens* (The Rope). Andover students have also produced two tragedies in Greek, Aeschylus' *Oresteia* and Sophocles' *Ajax*.

Latin for centuries depended more on the spoken than the written word, and oral tradition is celebrated at Andover in an annual Latin declamation contest. For students interested in knowing how Latin developed and changed, an informal course may be offered in the study of Italian through Latin. Mature students are encouraged to undertake independent projects of their own choosing on a tutorial basis. Greek dinners bring together students who are at different levels of study in the Classics.

Ever since its founding Andover has had a long line of distinguished teachers of classical languages. In recent years members of the Classics Department have published textbooks, both in Latin and Greek, for use in secondary schools. Latin and Greek classes at Andover are held in Pearson Hall, one of the oldest buildings on campus. Designed by Charles Bulfinch, it was dedicated in 1818 as part of the Andover Theological Seminary and since 1908 has belonged to Phillips Academy.



ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm requirements for the diploma. A student must prove himself competent in writing and reading and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, his opportunities multiply. He may enroll in any of the Literature Sequence courses that he has not yet taken; he may study any of the more than twenty-five advanced or specialized courses offered by the Department; he may become a member of one of the reading seminars; if he is a Senior, he may qualify for an independent project supervised by the teacher of his choice.

The Department also serves the needs of less advanced students. Tutorials are offered for training in the fundamentals of language. For foreign students, a specialist teaches English as a Second Language. The normal course for Juniors (ninth-graders) is Perception and Expression, designed to increase the students' awareness of the world around them and to introduce them to the arts of communication.

The walls that used to separate academic departments are crumbling. Many courses in the Performing Arts, most notably in Theater, are taught by members of the English Department. Most of the Interdisciplinary Courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the Foreign Language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either



passed the Competence Course in the basic skills of writing and reading or has proved himself competent on the departmental examinations.

Throughout the year the English Department sponsors trips to theaters in Boston and Cambridge, and several times each term brings writers and scholars to the campus to meet with students and faculty. Recent visitors have included Robert Penn Warren, Eleanor Clark, Anne Sexton and Professors Louis Coxe and Leo Marx. Students are further encouraged to exercise their analytical, oratorical and creative talents by competing in the Department's ten different prize competitions.

Many extra-curricular activities are related to the study of English. A strong and wholly uncensored weekly newspaper, *The Phillipian,* offers many opportunities for journalistic writing, photography and business management. *Cynosure,* a monthly magazine of editorials, attempts to express the diverse opinions of the Andover community. Though the school literary magazine, *The Mirror,* is basically a magazine of poetry and fiction, it also publishes graphics and photographs when it comes out three times a year.

The staff of the *Pot Pouri,* the school yearbook, describes its publication as "the chief permanent record to which alumni turn for an account of their years at Andover." It represents a long-accepted tradition: the poignant documentation of the events of the school year. The staff, however, does not restrict itself to an objective viewpoint. It tries to create a yearbook which reflects the changing moods and emotions of the Senior class in their final year at Andover.

WPAA-FM is a student-run educational FM station licensed by the FCC. It has superb equipment for a station its size and provides 58 hours per week of news, music, sports and educational programs to an area with a population of about 200,000. It is a member of the National Public Radio Network; its studio and transmission facilities are located in Evans Hall.

A term-contained course in public speaking, available all three terms, is an elective for Seniors and Upper Middlers. It provides training in voice production, articulation and speech making. Impromptu and prepared speeches help the student to develop poise, fluency and force. The Philomathean Society, founded in 1825, is devoted to discussion and debate. Membership is open to all who are interested in any form of public speaking or the discussion of ideas. Philo holds special classes in debating technique for the benefit of novices. Regular

meetings provide forums for the discussion of local, national and international issues. The Society has just recently expanded its program to include model United Nations activities. From time to time there are debates with visiting teams and once a year a Prize Debating Contest. The organization also sponsors visiting lecturers and discussion leaders to stimulate interest in economic, social and political problems.

The Press Club is a group of students interested in getting the news of Andover's athletic achievements into the newspapers. The club is one of the few that is always busy every Wednesday and Saturday as the members report the scores of all the athletic events to area newspapers. Students with an interest in sports reporting gain valuable experience as they write stories and report on the events.

During the winter and spring of 1974 about 50 boys and girls became involved with the Andover Tapes, a project designed for "creative sharing through media of information and perceptions about Andover." Topics ranged from "Spring Fever" and "A Day at P.A." to "Computer Pictures" and a "Search for School Graffiti." Slide tapes, sculpture, video tape, prints and written material–journals, newsletters, creative writing, essays–were used to record and create these portraits.

HISTORY AND SOCIAL SCIENCE

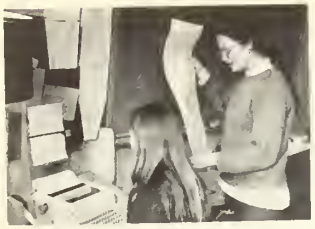
The thirty-one courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from modern art to primitive cultures, from the American family to utopian societies. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democracy such as ours, and on the hope that once interest in the story of man has been kindled, it will be pursued for the rest of an individual's life.

The courses for the two lower classes are generally short, term-long introductions to different aspects of man's experience: how the physical world affects him (Geography), how human societies originated (Anthropology), how man makes a living (Economics), how man tries to regulate the society in which he lives (Government). The work of individual men is explored through three courses in biography–American, European, and Asian. None of these courses–in fact no course in the department–uses a formal textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies and slides.

A requirement for the Andover diploma is the year-long survey course in American History. The course emphasizes discussion and interpretation based on close reading. In the Spring Term students choose their own topics for an extensive paper; they are encouraged to use the raw materials of history–newspapers, letters, diaries, interviews. One student wrote a paper on the attitude of the *New York Times* toward the Russian Revolution; another edited the diary his great grandfather wrote while on a voyage to Zanzibar.

For upperclassmen there is a smorgasbord of courses, including a course on the History of Women from ancient times to the present; for Asian enthusiasts there are courses on India and Southeast Asia; for city-oriented students, courses on the growth of the American city.

The department also offers four courses that involve off-campus study. Well qualified students in the American History survey courses may spend the Spring Term in Washington, working as an intern in the office of a Senator or Representative. Some of these interns have been hired by Congressmen for the following



summer. Students interested in problems of the modern American city can spend the Winter Term in a settlement house in Boston, studying at first hand the issues they have read about during the Fall Term. Students interested in modern Mexico can work and study in that country, living for a term with native families. And finally, those concerned about the effectiveness of American education can investigate the subject first hand as teaching assistants in local public schools.

Each year new courses in History and the Social Sciences are developed, old courses revised or discarded. New members of the department broaden the course offerings with their own special interests. The department believes that each of its eighteen members will generate excitement in his own field of exploration so that the variety of courses offered each year reflects individual Andover teachers. We were pleased that Michael Harrington, Tom Wicker, Jimmy Hoffa and Robert Coles visited and spoke at Phillips Academy during 1973-74.



MATHEMATICS

The opportunity to study mathematics at Andover is limited only by the interest and capacity of the student. The teaching staff has had a wide variety of training and experience. Some have been engineers, aviators, naval deck officers, navigators, musicians, athletes, or chefs, and all have been well trained in mathematics, most of them having at least a master's degree in their field. They are men and women who have contributed to the teaching profession by writing textbooks, by writing articles for journals, by serving on committees of such national organizations as the National Council of Teachers of Mathematics, the School Mathematics Study Group, the College Entrance Examination Board Committee, and the African Education Foundation. More importantly, they are devoted to teaching a subject which they find fascinating and which they wish to make fascinating for others.

Besides the standard sequential courses the department offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Faculty in the department are always willing to guide students in individual projects. Projects have in the past been in such fields as probability, computer programming, computer assembly languages, the theory of numbers, advanced geometry, linear algebra and Markov Chains.

The required sequential courses involve algebra, geometry, logic, statistics, computer programming, elementary functions and elementary probability. The trimester system allows each student to enter the sequence at the appropriate level or even to skip courses in the sequence by demonstrating a grasp of the material. The elementary and advanced elective courses include the study of limits and sequences, mathematical models, elementary and advanced calculus, analytic geometry, differential equations,

probability, statistics, computer analysis, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which was completely remodeled in 1964. It houses the campus computer center which offers time sharing in the BASIC-PLUS language through six public terminals. Instruction and practice in the use of the computer are given in the required course sequence. The computer is a PDP-11 manufactured by the Digital Equipment Corporation.

Over one-third of all mathematics at Andover is taken electively, much of it in preparation for the Advanced Placement Examination. In 1973, 87 students took the exam. A number of students also take courses in Cambridge at Harvard and at the Massachusetts Institute of Technology. The community of students who like math at Andover is sizeable, and they share their curiosity and knowledge by offering to tutor other students at the school. The Math-Computer Club stimulates interest in both the use of the computer and in the recreational enjoyment of math. The club has taught students without previous experience how to use the computer and has also arranged lectures on math and computer-related topics.

MODERN FOREIGN LANGUAGES

Knowledge of language is the key to communicating with and understanding other people. Foreign languages open the door to other countries and cultures and encourage cooperation between nations. The modern foreign languages offered at Andover are French, German, Russian, Spanish and introductory Italian.

In the first years Andover emphasizes understanding and speaking, and the foreign language is used in the classroom from the first day. Small classes of not more than fifteen students allow each individual the chance to speak

> "You can't disregard the academics of Andover, because it is their intense pace that electrifies our school . . . time is very precious. No one has time to sit back or just do nothing. If one enjoys the fast pace, Andover is great. I do."
> —Kirk McDowell '75





often. An extensive language laboratory makes frequent aural-oral practice possible.

Some courses are specifically designed to allow rapid advancement from one level to the next; a student enrolled in one of these courses may accomplish three years' work in two. Courses at the 4th, 5th and 6th year levels may include the study of the art, history, geography and literature of the foreign country. Students may prepare for the Advanced Placement Examination in fourth and/or fifth year courses and then may be able to advance directly into upper level courses at college.

Further opportunity for accelerated learning is offered by School Year Abroad programs in France, Germany and Spain. (See page 9). Programs in Russia and South America are also being planned.

Students, particularly Seniors, may wish to pursue an independent project with the modern language faculty. The project is planned by both student and tutor. Apprentice teaching with a beginning language section has been a popular project for advanced students. Girls and boys may compete in national language prize examinations, and Andover students have consistently done well in these competitions. Language clubs, foreign language plays and movies, and trips to museums all have generated interest in the language program.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States, as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and enables him

to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

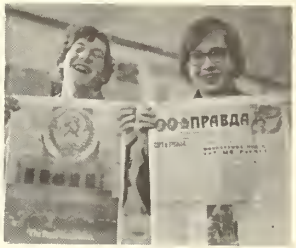
The Andover student may at the third year of French elect any sequence of trimester courses in literature, civilization or intensified language study. In the fourth, fifth and sixth years this study can continue in greater depth. School Year Abroad offers a year in Rennes and a one term program in Dijon. A six-week Short Term Institute immersion in French provides further curricular options. A weekly *Veillée* and a radio program on WPAA give students the opportunity to speak under different circumstances outside the classroom.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Its 100,000,000 speakers embrace not only the populations of West and East Germany and of Austria but also three-fourths of Switzerland. In addition, at least 20,000,000 people speak German as a second language in Holland, Denmark, Sweden, Poland, Czechoslovakia, Hungary, Yugoslavia, northern Italy and eastern France. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism (Marxism) and democracy in the world. Many of the most important developments in modern physics (Einstein's theory), electronics, chemistry and engineering were originally published in German, and American businesses have realized the importance of personnel able to speak German. Germany's leading role in the European Common Market has contributed greatly to the importance of the German language.

Russian

Let's help build bridges! Astronaut Don Slayton is helping. He is learning Russian in anticipation of an historic rendezvous in space with the Soviet Union. Our government is helping. It has recently signed treaties which reflect a new spirit of cooperation and mutual respect between the Soviet Union and our country. Together we shall attempt to pursue unsolved problems in medicine, ecology, education, international law and trade, to mention a few. One manifestation is a mutual "think tank" now in its embryonic stage yet destined to play a significant role in the well-being of all our citizens.



Nickolai Shestakov is helping. He is Principal of School No. 1 in Minsk, U.S.S.R. Mr. Shestakov recently spent several weeks at Andover. He and our community mutually discovered friendship, respect, and a willingness to cooperate. We expect that this working relationship will result in an early exchange of teachers and students between our schools and communities.

Approximately 40% of Russian secondary school students are learning English. The Soviet Union has many special secondary schools for English in which the major portion of the curriculum (mathematics, science, etc.) is instructed and conducted in the English language. Meanwhile, a fraction of 1% of American secondary school students study Russian, but secondary school is the best place to begin Russian, unless, of course, your mother is Russian, or you are so fortunate as to attend an elementary school offering Russian.

As increasing numbers of participants become involved, will our doctors, legal experts, scientists, educators and businessmen be obliged to carry on all mutual investigations with Soviet counterparts in English?



Certainly from the standpoint of mutual respect, this would be a poor beginning.

The obvious solution is an increasing pool of intelligent young American men and women who are not necessarily training to become Russian specialists or translators, but doctors, lawyers, educators, scientists and businessmen who also know the Russian language.

The Russian Department, with four instructors, most of whom have traveled and studied in the Soviet Union, offers four full years. Well-motivated students of average verbal ability may elect Russian in their Junior year as a first foreign language with complete confidence. Russian as a second foreign language is also a popular choice.

Spanish

Not only does the United States have social, cultural and economic ties with Spanish-speaking nations to the south, but we also have many areas within the country in which Spanish is used more frequently than English. The presence of Spanish-speaking students at Andover gives everyone an opportunity to use Spanish on the campus.

The Spanish Department offers the regular four year study program as well as additional years through acceleration or through School Year Abroad in Spain. Many graduates of School Year Abroad are now studying Spanish in college, helping Spanish-speaking people in the United States or are good will ambassadors in Spain and in Spanish-American countries. In the past few years Spanish students at Phillips Academy have been an important part of the Lawrence Tutorial Program, the South End Project in Boston and the Man and Society course in Leon, Mexico. Their knowledge of the Spanish language has been an important asset to instructors and participants in these projects.

RELIGION

The study of religion at Andover is not a moral training exercise in which students are indoctrinated with a particular point of view. It is an opportunity to consider religious, philosophical and moral questions that confront us, to study the intellectual, existential and spiritual ideas of the past and of today. Some of the courses offered in 1974-75 were The Voice of Prophecy, Religion and the Human Situation, Ethics in Contemporary Society, Existentialism and Philosophy, Introduction to World Religions, The Old Testament, The New Testament.

Any student who wishes to do so may join the Chapel Council. The members of the Chapel Council assist the school ministers in the Sunday Services, serving as ushers, helping in the serving of communion and deciding the distribution of the morning offerings, which are given to worthy organizations.

Worship services at Andover are available for all who wish to participate. The Protestant service is conducted at 11 o'clock on Sunday mornings in the Cochran Chapel. A Roman Catholic mass is celebrated at 10 o'clock on Sunday mornings in Kemper Chapel. The Jewish student congregation often has services on Friday evenings.

Jewish activities are planned, coordinated and promoted under the leadership of a student Jewish Activities Board. In addition to services and holiday observance, all students who are interested may help with a drive for the Israel Emergency Fund; the Board also plans occasional Sunday morning breakfasts or other gatherings.

The Newman Club is the campus organization serving the spiritual needs of the Andover Catholic community. The club oversees Masses celebrated by a priest from Merrimack College on Sundays and Holy Days. Folk masses, seminars and breakfasts are also sponsored by the club.

A Fellowship of Christians meets regularly for discussion, study and prayer. The Fellowship has not only carried on its own program at Andover but has maintained contacts with other groups elsewhere through joint meetings and conferences. An integral part of the worship experience at Andover is the retreat program, a time when students and faculty may spend a weekend together at Cape Cod or in New Hampshire for conversation, recreation and confrontation with ancient and contemporary ideas.

Andover will offer a new course in Philosophy beginning September, 1974; this addition to the curriculum is made possible by the Abbot Academy Association, a group which funds extra and experimental programs at Phillips Academy.

SCIENCE

Archaeology

The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last 75 years and has published many reports of its scientific investigations. The staff of the Foundation offers Andover students an introductory term-contained course in archaeology in the fall term. The course deals with the prehistoric development of civilization in the four earliest centers: Mexico, Peru, China and the Near East, as well as with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum assist in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources. A summer field school for high school students and college undergraduates has been



"Most of Andover's faculty love teaching the subject they teach. Above the diploma requirement level, classes are composed of highly motivated and able students which allow teachers to explore their favorite subject to the fullest.
—Earl Killian '75"

held in conjunction with recent research in Mexico. For the past four years a short field trip for Andover students has been organized during the winter to visit important archaeological sites in Mexico.

Present research is concerned with the origins of agriculture and the concomitant rise of civilization in the New World. Major publications based on the analysis of these materials are now being printed. Continuing research programs are planned for Mexico, Peru and possibly, in the coming year, China. The Peabody Foundation is under the direction of Dr. Richard S. MacNeish, a member of the National Academy of Sciences of the United States.



Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to the basic biology course, the department offers advanced level courses in ecology, animal behavior and advanced placement biology. The basic course gives students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides and films are all part of the course.

Animal Behavior studies wild life in eastern Massachusetts. The course plans field trips to the coast, salt marshes, lakes and wooded areas within a few hours of Andover. Every student undertakes a serious study of some common animal. In the past students have worked with chickens and ducks raised in the school incubator. Some have studied the breeding patterns of Canada geese in the Cochran Sanctuary. Others have studied territoriality in tropical fish, and in sparrows, and dominance and aggression in chameleons. Still others have studied the mating behavior of captive ring-necked doves.

The term-contained ecology course begins by presenting a solid foundation in the basic concepts—energy flow, nutrient cycles and population dynamics. The ways man has affected and disturbed his environment are the main topics of the remaining two-thirds of the course. The laboratory is well equipped to test water for pollutants. Demonstrations and micro- and macroscopic studies of communities are also included in the course.

An advanced biology course prepares older students for the Advanced Placement exam. The material offered by the basic biology course is reviewed, and new concepts, techniques and examples are also presented. The labs give students experience in the techniques of centrifugation, chromatography, electrophoresis, spectrophotometry and statistical analysis.

Informal field trips are held throughout the year for interested students who may or may not be currently enrolled in a biology course. Many of these trips are concerned with bird identification along the Merrimack River in Newburyport, where students may see over one hundred species of birds in one day. The Biology Department has many pairs of binoculars available for student use and a telescope which is useful on extended field trips. The small zoo in Evans Hall is maintained by students. Its population varies with student interests and the reproductive rate of the animals. Currently there are fifteen rats, twenty-five mice, five gerbils, six frogs, two chickens, one boa constrictor, one alligator and one snapping turtle. Some of these animals are used for student projects; others are just fun to have around as pets. Occasionally a student takes the boa for a walk around the science building; friendly "Jake the Snake" has an affection for anyone he can coil around. The department is equipped with a phase microscope and several camera attachments for studying photomicrography. In the basement of Evans Hall we have an extensive bird collection on loan from Harvard University.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those inter-





ested in photoperiodism. Facilities are also available for the study of many aspects of bacteriology. Independent study is encouraged, and, indeed, is the basis of several of the term-contained courses.

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, draw many species of small land birds and provide nesting places for grouse and pheasant. Other areas are set aside for student projects such as demonstration of bird feeders, experimental plantings for attracting birds and soil studies. Special paths are designed and planted to show local ferns, wildflowers and trees in their natural habitats. The Log Cabin, a rustic building with a large stone fireplace, kitchen, flagstone terrace and broad lawns, is an attractive setting for social events in all seasons.

The Natural History Club organizes field trips to fresh and salt water marshes, quaking bogs and other typical New England habitats. In recent years it has acted as the ecology lobby on campus fighting to maintain the quality of the human environment and to heighten the community's awareness of current developments in this area. Working with students from neighboring schools and adult members of the community from Andover Ecology Action, the Natural History Club has been instrumental in developing the town's recycling program, in banning the use of certain pesticides, and in preserving natural areas of the town of Andover.

Chemistry

The Chemistry Department offers several full-year introductory courses at various levels. Chemistry 43,44 and 45 enable students to continue work in chemistry after completing the first course.

Students have undertaken many special projects in the well stocked laboratory. For example, one student recently investigated the "Miller experiment," the synthesis of amino acids by electric discharge through methane, water vapor and ammonia. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Two students have studied organic qualitative analysis as an introduction to the chemistry of organic functional groups. Although qualitative analysis has been included in the latter part of many elementary courses in organic chemistry, this may be the first instance of its use at the very beginning.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including five Mettler single-pan analytical balances. There are instruments which enlarge the scope of feasible projects—a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Convenient access to the computer (PDP-11, resource time-sharing system) in the Mathematics Department is provided by a teletype terminal located in the Chemistry wing of Evans Hall.

Physics

The Physics Department teaches four basic courses of various degrees of difficulty. All require laboratory work and consist of classroom demonstrations, discussions and problem solving. It also offers courses in earth science, meteorology, astronomy, physical science and the history of science for younger students, as well as electronics, astronomy and college level advanced placement physics courses for older students.

Project work may be done for credit or merely for one's own satisfaction. In recent years students have transmitted conversations by means of laser beams and built a Van de Graff proton accelerator. One boy worked on holograph experiments; another built his own electronic calculator. Other students have used sophisticated equipment to measure the velocity of light, determine Plank's Constant and perform experiments of their own design.

The Astronomy Club has a six-inch Brashear refracting telescope mounted in a dome on top of Evans Hall and an eight-inch Celestron telescope. Equipped with a new clock drive, the Brashear telescope can be used for both visual observation of the planets and stars as well as deep sky astrophotography.

The Model Airplane Club provides facilities for the construction of model aircraft and a meeting place for students with an interest in flying both model and real aircraft. The club offers three kinds of flying activities– free flight, control line and radio controlled airplanes– and tries to fly at least once a week during the fall and spring, though limited to control line model flying in the Cage in winter time.

The fifty-year old Amateur Radio Club can provide all the necessary theory, teaching and equipment to help a student get a novice (or higher) license. Members of the Mechanics Club may bring to the school a car or motorcycle to work on during the year. The club also sponsors its own projects: working on faculty-owned cars or a vehicle purchased by the club. For all "rock-hounds" the Mineral Club organizes field trips. In a room equipped for the sorting, listing and polishing of minerals, the Mineral Club plans case displays of collections.

Psychology

The Psychology Department was originally formed to provide specialized counseling to students. It still offers these services but recently has expanded to offer two courses in Psychology. The first is a Human Relations course for Seniors who are interested in learning about human social behavior by studying their own experiences in a small group. The second is a Human Awareness course for underclassmen interested in learning about the psychology of human behavior and development, especially as they relate to life in a residential school.

Individual instructors in the department welcome the opportunity to discuss special interests with any student and have sponsored individual projects such as a study of student values, the evaluation of a social service experience and a program of reading and discussion in a specialized branch of the field.

The Psychology Club is an extra-curricular activity with a program responsive to the wishes of members. Lectures by visiting specialists, movies and other resources form the basis for group discussions of general topics, small special-interest group meetings and projects that involve reading, reporting, "learning by doing" and field trips.



athletics

Andover has a comprehensive athletic program. Sports, physical education and outdoor programs are all important to the Andover curriculum and involve every student. The main objective is the development of physical skills and self-confidence, courage and self-control. The program responds to the capabilities and interests of individual students. Most students are involved in intramural and interscholastic sports. Games are scheduled with neighboring schools and with college freshmen. Junior boys have their own athletic program; for all other students the levels of competition are graduated from intramural to junior varsity to varsity programs. To insure balanced competition, a physical co-efficient factor is used in scheduling both interscholastic and intramural contests. A separate girls' gymnasium insures an athletic program particularly suited to the needs of young women. A team of trainers and an Infirmary staff skilled in sports medicine care for boys and girls involved in sports.

Competitive sports are supplemented by a range of non-competitive and non-traditional athletic pursuits. Over a decade ago Andover was instrumental in bringing the Outward Bound program to the United States. Since that time the school has developed a sophisticated outdoor activity curriculum that includes rock climbing, winter mountaineering, cycling, snowshoeing, camping, solo survival, orienteering and ski-touring. Weekend expeditions are complemented by daily skills training, group problem solving and short trips. In the past two years individual faculty members have taken Search and Rescue students on expeditions over vacation to Colorado, Mexico and Nepal.

To make certain that each student has a chance to develop physical skills, a basic evaluation test is administered to all new girls and boys. New Juniors and Lower Middlers have physical training four hours a week for one term of their first year, in addition to regular athletics. This non-competitive program consists of drownproofing (survival swimming), gymnastics and rope training. The standards of performance are based on each student's physical capacity and his or her mental and emotional reaction to controlled stress situations. It is designed to develop a sense of personal achievement and success. The self-confidence and new physical skills gained in the first year assist students as they move into more advanced stages of physical training.

Non-swimmers are given special instruction to insure that they can meet reasonable standards of proficiency. Each spring the department also offers at a nominal fee a Senior Life Saving course and a Water Safety Instructors course for the proficient swimmers who wish official accreditation. The Andover Athletic Advisory Board is a student organization which works with the Athletic Department to make school athletic policy.

There are many school groups organized for particular athletic activities. A Karate Club teaches the elements of that martial art. The Judo Club provides train-



ing in judo, and for those more advanced, instruction in self-defense and in the artistic and philosophical aspects of judo. The Scuba Diving Club organizes ocean trips for experienced divers, and for those who have no experience the club teaches a course in diving. The Rifle Club is a large group of students who wish to shoot for pleasure, for National Rifle Association awards or for the school team, which has a full schedule of interscholastic competition. The Ski Club organizes trips to New Hampshire ski areas, including Cannon, Wildcat, Loon and other mountains. It also sponsors movies on ski racing.

Every year an exotic range of informal student-inspired sports activities comes into being and dominates the long spring evenings. Recent years have featured stickball, boxball, cart races, paddle tennis and kite flying.









Fall Term Athletics

Girls

Field Hockey
Soccer
Tennis
Riding
Cycling
Search & Rescue
Crew
Swimming
Squash
Cross Country

Boys

Football
Tennis
Cycling
Search & Rescue
Crew
Cross Country
Soccer
Golf
Water Polo

Co-ed

Tennis
Cycling
Ballet
Cross Country
Judo
Karate
Modern Dance
Golf

Winter Term Athletics

Girls

Track
Swimming
Basketball
Skiing:
- a. Competitive
- b. Club Cross Country
- c. Recreational

Paddle Tennis
and/or Squash
Ballet
Modern Dance
Fencing
Gymnastics
Search & Rescue
Riflery
Exercise Program

Boys

Track
Swimming
Hockey
Wrestling
Basketball
Skiing:
- a. Competitive
- b. Club Cross Country
- c. Recreational

Paddle Tennis
and/or Squash
Gymnastics (Beginning)
Search & Rescue
Riflery

Spring Term Athletics

Girls

Softball
Track
Lacrosse
Tennis
Crew
Search & Rescue
Canoeing
Cycling
Archery and Squash
Riding
Ballet

Boys

Baseball
Track
Lacrosse
Golf
Crew
Search & Rescue
Canoeing
Cycling
Riding
Tennis

Co-ed

Softball
Track
Tennis
Search & Rescue
Canoeing
Archery
Ballet

“

Students develop a great academic foundation at Andover, but for me the most significant part of the school was that Andover offered the opportunity to learn to live and make friends with people of diverse backgrounds, as well as how to live on your own and depend on yourself.
—Bill Boeschenstein '73

”





health care tuition

HEALTH CARE

The Isham Infirmary-Hospital of Phillips Academy is accredited by the Joint Commission on Accreditation of Hospitals and is fully licensed as a hospital by the Commonwealth of Massachusetts. The hospital has an x-ray department and clinical laboratory with a full-time technician. Qualified physiotherapists are available either in the Infirmary or Trainer's Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a. m. to 5:00 p.m. Isham Infirmary-Hospital is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

In addition to the daily outpatient clinic held by the Medical Director, who is a specialist in internal medicine, regular clinics are conducted at Isham Infirmary-Hospital in dermatology, orthopedics, and dentistry. Staff consultants are available in most specialty fields of practice, and full-time clinical psychologists can provide professional counseling.

TUITION 1975-76

Annual tuition fees for 1975-76 are $3700 for boarding students and $2900 for day students (who must live in Andover, North Andover, North Reading, Methuen, or Lawrence). A tuition change for 1976-77 is currently being considered. The tuition fees for 1976-77 will probably not exceed $4000 for boarders and $3200 for day students.

Tuition may also be paid in ten equal monthly installments starting on August 1 and ending on May 1. A service charge of $10 is made for this plan. Another alternative is the use of the Insured



Tuition Payment Plan, arranged with a private agency. Information about these two alternatives, and application forms, are sent to parents before the opening of school.

No rebate will be made against the amount of the tuition installment due on September 15 for any student who for any reason is dismissed or withdrawn between the opening of school in the fall and January 15. No rebate will be made against the tuition installment due on January 15 for any student who is dismissed or withdrawn thereafter.

The tuition charge covers instruction, board, room (including furniture), physical training and athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and the authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures. An additional charge of $30 is due with first tuition payment for providing and laundering bed linen of the boarding student.



The tuition charge does not include tutoring, language training, special instruction in music or athletics, materials' fees for art courses, medical insurance, dental care, special medical expenses, laundry, textbooks, dues to school organizations, or breakage and damage to school property. All protective athletic equipment and uniforms are furnished by the school; however, all students are required to bring their own sneakers and urged to bring along whatever other athletic equipment they already possess. Bills for items not included in the regular tuition charge may be rendered at any time during the school year.

Students otherwise eligible to return in a given school year will not be allowed to register if their school accoun for the preceding year have not been paid in full. The diploma of the Academy will not be awarded to students whose school accounts are not paid in full by June 1.

The charges and terms indicated above represent a sincere effort at a realistic projection made at the time this catalog went to press. In these days of dramatic cost increases, changes may have to be made. If this becomes necessary, notification will be given prior to admission or re-registration.

Parents or students may open an account at the Treasurer's Office for personal expenses during the schoo year.

Other Expenses

As a rough guide to parents in budgeting for the total expected expenses of each academic year, the following low-average approximations of extras are given.

Athletic equipment	$ 75.00
Laundry and cleaning	50.00 to 200.00
Medical insurance (optional)	35.00
Books and supplies	150.00
Dues, publications and charitable contributions	20.00
Breakage deposit (refundable)	0 to 25.00
Miscellaneous, including spending money	120.00
Total	$450.00 to $675.00





“

Andover should vigorously recruit an international student body, boys and girls, of social, racial, national, and religious diversity.
—T.R. Sizer

”



The school's constitution, written in 1778, states that Andover "shall be ever equally open to youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over two thousand candidates the three hundred fifty most promising and deserving young people. The school's endowment covers approximately fifty percent of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section).

APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure by February 1, and they may expect a decision from the Admissions Committee by March 10. The possibility of admission is somewhat lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of $100 is required to reserve a place at the time admission is offered to an applicant.

The four steps for Application

1 Submit the Preliminary Application Card and the non-refundable $10 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.)

2 Complete the Personal Interview requirement. An interview is required of all applicants. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Candidates who cannot visit the school, however, should arrange to have an interview with an Alumni Representative in their geographical area. (See page 46.)

3 Return the Final Application Form. Final Application Forms are mailed in mid-November to candidates who have submitted a Preliminary Application card for the following fall. Forms should be returned within three weeks of receipt. (Late applicants should return forms immediately.)

4 Take the Secondary School Admissions Test. (12th grade or Postgraduate candidates should refer to the information on page 44.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, N. J. 08540, will be sent by Andover to all 1975-76 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 13, 1975 — March 6, 1976
January 17, 1976* — April 10, 1976
May 15, 1976*

*International administration



Candidates are strongly urged to take the December, 1975 administration of the SSAT. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1976 administration.

Senior Class Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests. (C.E.E.B., Box 592, Princeton, New Jersey 08540.) After the test date candidates must ask the College Board, in writing, to send all test results to Phillips Academy. A check or money order for $2 made out to C.E.E.B. must accompany that request. A number of well-qualified Postgraduates admitted each year are treated as full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

Whom to Contact at Andover

If you have questions about Andover's admissions or application procedures, please contact the Admissions Office.

Director of Admissions: Joshua L. Miner
Address: Admissions Office
Phillips Academy
Andover, Massachusetts 01810

Office hours: Monday through Friday, 9:00 a. m. to 5:00 p. m.
Saturday, 9:00 a. m. to 12:00 noon
Telephone: 617-475-3400

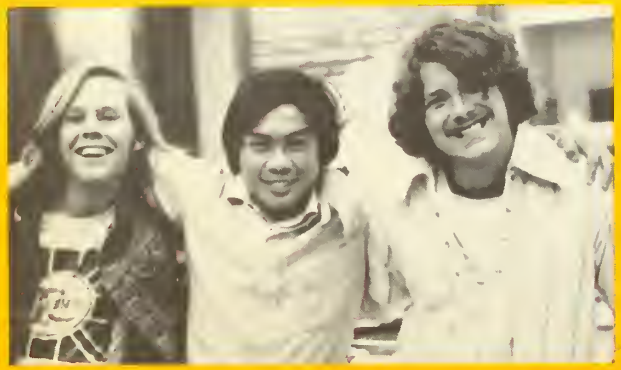
Early Decision

Andover will not participate in any early decision plan for admissions in September, 1976.

FINANCIAL AID

Over three hundred families receive financial aid in the form of a scholarship grant, a long-term low interest loan or a combination of both. In 1976, $750,000 will be available for financial assistance. Approximately $200,000 is reserved for new students. The dollar amount of the assistance varies from $250 to full tuition. Each family indicating a need for assistance on the Preliminary and Final Applications will be mailed a Parent's Financial Statement which is processed by the School Scholarship Service in Princeton, N. J.

All awards are reviewed annually and a Parent's Financial Statement must be filed each year if continued aid is needed.





ALUMNI REPRESENTATIVES

Candidates who are unable to visit Andover should arrange an interview with one of the Alumni Admissions Committee members listed below. It is suggested that a telephone call be made or a letter sent in advance to establish a mutually convenient time. A candidate who finds it difficult to visit one of the interviewers listed below should communicate with the Admissions Office in Andover. An effort will be made to locate an additional representative from that area among the graduates of either Phillips or Abbot Academy.

Admissions Interview Schedule

During the coming school year the Director of Admissions and representatives from the Administration plan to be in the following cities:

Seattle San Francisco Los Angeles	September 28 to October 3
Cleveland Detroit Chicago	October 12 to October 17
Atlanta New Orleans Memphis	October 27 to October 31

Candidates wishing to complete the interview requirement in one of these areas should contact the local Alumni Representative whose name shows an asterisk on the following list, or they may arrange an appointment by writing or telephoning the Phillips Academy Admissions Office in advance of the visit.

ALABAMA

Bessemer
Ms. Jacqueline Carter '72
5008 Tucker St., 35020

Birmingham
Robert B. Donworth, Jr. '42
1500 Brown Marx Building
2000 1st Avenue North 35203

ALASKA

Anchorage
John K. Brubaker '55
2110 Otter Street 99504

Juneau
Cadmus Z. Gordon, Jr. '16
Box 1153 99801

ARIZONA

Litchfield Park
George T. French '29
P. O. Box 578
1024 Sierra Hermosa 85340

Phoenix
Mrs. William M. Riegel '53
4941 E. Rockridge Rd. 85018

Scottsdale
Mrs. William E. Dampier '47
4721 No. 70th St. 85257

Tucson
Keith S. Brown '31
3200 North Swan Rd. 85716

John S. Greenway '42
1634 North Olson Ave. 85719



ARKANSAS

Little Rock
Mose Smith, III, M. D. '48
5324 West Markham St. 72205

CALIFORNIA

Berkeley
Patrick J. O'Hern '65
1742 Curtis Street 94702

Beverly Hills
Thompson K. Vodrey '52
1529 Gilchrest Drive 90210

Davis
Donald M. Reynolds '38
University of California
Dept. of Bacteriology 95616

Hollywood
John J. Leone '66
2616 Hollyridge Dr. 90068

La Canada
Peter B. Eakland '63
5251 North Haskell Rd. 91011

Los Angeles
*David A. Cathcart '57
Gibson, Dunn & Crutcher
515 South Flower St. 90071
213-488-7000

George Davis, M.D. '53
4616 Keniston Ave. 90043

Walter L. Farley, Jr. '28
12300 1st Helena Dr. 90049

Raymond F. Norton '47
3416 Manning Av. #1807 90064

Manhattan Beach
Mrs. James P. Regan '57
1717 Highland Ave. 90266

Marysville
Harold S. Edwards '28
770 Ramirez Road 95901

Newport Beach
John E. Kidde '64
839 Amigos Way 92660

Palo Alto
Henry E. Riggs '53
634 Lowell Ave. 94301

Donald A. Way '63
P. O. Box 338 94302

Pasadena
Russell M. Decker '56
691 Holladay Rd. 91106

Riverside
Peter C. Parsons '55
Riverside County Publ. Co.
P. O. Box 8368 92505

Ross
H. Leonard Richardson '45
The Katherine Branson School
94957

San Anselmo
Ivan B. Higgins, Jr., M.D. '62
10 Elm Ave. 94960

San Diego
Norman R. Allenby '51
Hillyer & Irwin
530 B. Street-Suite 1400
92101

William S. Creighton '39
Wells Fargo Bank
500 Broadway 92101

San Francisco
Mrs. James K. Brown
326 Elsie St. 94110

Samuel Dysart, Jr. '46
Dymo Industries, Inc.
1 Embarcadero Center 94111

Mrs. Dorothy M. Easton '61
1222 Sixth Ave. 94112

*Alan L. Fox '60
3300 Crocker Plaza 94104
415-567-6754

Tom E. Pollock, III '61
One Maritime Plaza
Suite 2000 94111

William W. Sterling '57
Heller, Ehrman, White &
McAuliffe
44 Montgomery St. 94104

Santa Barbara
Mancel T. Clark, Jr. '28
605 San Ysidro Rd. 93108

Shinger Springs
Marshall T. Gleason '33
3067 Cambridge Rd. 95682

Stanford
Miss Marna Parke '72
Stanford University
Box 9248 94305

COLORADO

Aspen
Stephen W. Harris '38
P. O. Box 8448 81611

John P. McBride '56
P. O. Box 1940 81611

Boulder
Mrs. Constantinos Emmanuel '54
3065 Heidelberg 80303

Colorado Springs
Mrs. William Boddington '41
1433 Alamo Ave. 80907

Denver
Peter Grant '49
545 Race Street 80206

David C. Wilhelm '38
Wilhelm Foods, Inc.
P. O. Box 16086
5590 High Street 80216

Englewood
John F. Malo '40
4975 So. University Blvd.
80110

Golden
William D. Lynch '38
14295 Braun Road 80401

Grand Lake
James E. Liles '55
Rocky Mt. Nat'l. Park 80447
P. O. Box 442

CONNECTICUT

Greenwich
Gerard E. Jones '55
Kenilworth Terrace 06830

New Haven
Nathaniel M. Cartmell, Jr. '42
282 Prospect Street 06511

Stonington
Miss Nancy Roberts '68
R. D. #1 Box 48
Flanders Road 06378

DELAWARE

Wilmington
Mrs. Robert Bryant '65
2309 Saymour Road 19005

Mrs. Reeves W. Hart, Jr. '47
18 Briar Rd.
Briarwood 19803

DISTRICT OF COLUMBIA

Washington
George W. Beatty '50
Lee, Toomey & Kent
1200 Eighteenth St., N. W.
20036

Lawrence C. Dalley, Jr. '45
Securities Dealers Ins. Corp.
888 17th St., N. W. 20006

Robert A. Martin '50
Dept. of State, Rm. 7424 NS
20520

Peregrine White '29
National Academy of Sciences
2101 Constitution Ave. N. W.
20418

FLORIDA

Bal Harbour
George H. Hunt, Jr. '37
90 Harbour Way 33154

Jacksonville
Laurence F. Lee, Jr. '40
Peninsular Life Ins. Co.
P. O. Box 2667 32203

Arthur W. Milam '45
Milam, Martin & Ade
P. O. Box 58 32201

Robert D. Van Cleve '50
Riverside Clinic
2005 Riverside Ave. 32204

Miami
David J. Williams, II '38
13815 S. W. 84th St. 33143

Naples
Robert W. Hattemer '49
440 Spinnaker Drive 33940

Sarasota
Parker C. Banzhaf '38
3435 Sea Grape Drive 33581

Winter Haven
Richard C. Cheney '48
Barnett Bank of Winter Haven
11 5th St., S. W. 33880

Andrew P. Ireland '48
Barnett Bank of Winter Haven, N.A.
P. O. Box 820 33880

GEORGIA

Atlanta
Herbert R. Elsas '28
3100 First National Bank Tower
30303

*Peter C. Mohr '54
1035 Angelo Court, N. E. 30319
hme. 404-261-5473
off. 404-658-1100

Savannah
Dr. William C. Rhangos '49
Savannah Orthopedic Clinic, P. A.
210 Hall St., East 31401

Stone Mountain
Ernest Matton '55
4389 Bramwell Drive 30083

HAWAII

Honolulu
Mrs. Kyran M. O'Dwyer '55
6240 Keokea Place 96825

Thomas L. Stirling '59
Kelso, Spencer, Snyder
& Stirling
Suite 1800, 745 Fort St.
96813

IDAHO

Boise
Richard W. Hirst '28
c/o Intermountain Gas Co.
555 South Cole Road
P. O. Box 7608 83705

ILLINOIS

Kenilworth
Mrs. Robert L. Kallman '52
535 Brier Street 60043



Northfield
*W. Newton Burdick, Jr. '35
Home 217 Dickens Rd. 60093
312-446-5660
off. 1500 Skokie Blvd.
312-272-1100

Peoria
John F. Dolan '58
1125 First Nat'l. Bank Bldg.
61602

Peoria Heights
Robert T. Stevenson, Jr. '53
4849 Grand View Dr. 61614

Quincy
Mrs. Sandra C. DuPuy '58
2015-½ Vermont St. 62301

INDIANA

Evansville
Reginald B. Collier '45
7300 Newburg Road 47715

Indianapolis
C. Perry Griffith '45
499 Forest Blvd. 46240

South Bend
Mrs. Robert E. Oswald '56
3102 So. Miami St. 46614

KANSAS

Junction City
John G. Montgomery '58
The Junction City Daily Union
814 No. Washington St. 66441



Shawnee Mission
Howard T. DuBois '43
5715 Windsor Drive 66205

KENTUCKY

Anchorage
Samuel S. Caldwell, Jr. '29
1604 Lincoln Lane 40223

Louisville
H. Hewett Brown '55
Mutual Benefit Life Ins. Co.
100 E. Liberty St., Suite 300
40202

Prospect
Alexander C. Browne '60
7839 Wolf Den Branch Rd.
40059



LOUISIANA

New Orleans
*Marshall L. Posey, Jr. '55
5501 Cherlyn Drive 70124

Shreveport
Donald A. Raymond, Jr. '32
1132 Erie St., 71106

MAINE

Robinhood
James R. Adriance '28
04530

MARYLAND

Annapolis
H. Richard Duden '43
New York Life Ins. Co.
49 Maryland Ave. 21401

Chevy Chase
Frederic C. Thomas '46
3512 Cummings Lane 20015

Oxon Hill
Andrew J. Combe
9104 Locksley Rd. 20022

Ruxton
Gardner W. Smith '49
1503 Old Orchard Lane 21204

MASSACHUSETTS

Brockton
George R. Ireland '74
266 West Elm St. 02401

North Andover
Thomas K. Burgess '62
Brooks School 01845

Winchester
Paul N. Anderson, Jr. '41
11 Sheffield Road, W. 01890





MICHIGAN

Birmingham
Frederick G. Bahr '47
4050 W. Maple Road 48010

Mrs. William Reepmeyer '61
440 Chesterfield 48009

Detroit
*James N. Candler, Jr. '60
800 First National Buildings
Grosse Pointe Shores 48226

Grosse Point Shores
William D. Dahling '46
60 Hawthorne Road 48236

Leland
George A. Ball '49
P. O. Box 235 49654

West Bloomfield
Gilbert R. Bamford '58
5581 N. Coat Lane 48033

MINNESOTA

Duluth
Oliver M. Houx '57
3318 Kolstad Ave. 55803

Long Lake
Thomas M. Crosby, Jr. '56
1612 Willow Drive 55356

Madison
Mrs. Robert Bly '47
Odin House, RFD 2 56256

Rochester
Dr. Douglas McGill '47
303 SW 6th Ave. 55901

Wayzata
J. Kimball Whitney '46
559 Harrington Road 55391

MISSISSIPPI

Lumberton
Michael R. Eubanks '58
302 11th Ave. 39455

MISSOURI

Columbia
George C. Miller '35
600 South Greenwood 65201

David B. Rogers '59
2406 Ridgefield Rd. 65201

Jefferson
Benner C. Turner '23
411 Hickory St. 65101

Joplin
Lawrence S. Crispell, M.D. '38
6th and Pearl Ave. 65801

Kansas City
James J. Fisher '56
Kansas City Star c/o City Desk
18th & Grand 65108

St. Joseph
Robert A. Brown, Jr. '49
Brown, Douglas & Brown
510 A Francis St. 64503

F. Gregg Thompson, Jr., M. D. '47
902 Edmond St. 64501

St. Louis
Jeremy T. Johnstone '48
36 Rio Vista Dr. 63124

Mrs. Robert D. Mudd, Jr. '59
7 Country Aire 63131

John Shepley '42
9450 Old Bonhomme 63132

Eugene F. Williams '42
701 Barnes Rd. 63124

NEBRASKA

Omaha
Philip S. Kemp '43
740 North Happy Hollow 68132

NEVADA

Deeth
William B. Wright, Jr. '50
Mary's River Ranch 89823

Las Vegas
Dr. Wm. B. A. Bentley '42
3104 Sonia Drive 89107

Mrs. Daniel T. Skelly '54
3738 Territory St. 89121

Reno
Robert S. Kimball, III '51
P. O. Box 3117 89505



NEW HAMPSHIRE

Dover
Rev. L. Arthur Domingue '58
80 Silver Street 03820

Plymouth
Mrs. Roger Maynard, Jr. '62
Fox Park, Apt. #34 03264

Portsmouth
Mrs. Richard Soule '70
93 High Street 03801

NEW JERSEY

Ridgewood
Kenneth E. MacWilliams '54
323 Hamilton Road 07450

Summit
Carey Orr Cook '61
20 Greenbriar Dr. 07901

Westfield
Mrs. William Timmins '59
534 Clark Street 07090

NEW MEXICO

Albuquerque
John P. Eastham '45
Rodey, Dickason, Sloan,
Akin & Robb
First Nat'l. Bank Bldg-West
87103

Gregory H. Illanes, Jr. '38
Quinn & Co.
200 2nd St., N. W. 87101

George F. Peters '62
906 11th St., N. W. 87102

Santa Cruz
Thomas W. Mayer '61
P. O. Box 171 87567

NEW YORK

Amsterdam
Leon H. Young '20
22 Summit Ave. 12010

Bedford
John H. Odden '63
c/o The Bedford-Cisqua School
Box 488 10506

Binghamton
David J. Adzigian '58
405 Manchester Rd. 13903

Buffalo
Walter F. Stafford, Jr., M. D. '38
24 Tudor Place 14222

John N. Walsh, Jr. '39
25 St. Catherines Court 14222

Cazenovia
Robert B. Simonton '50
5360 West Lake Rd. 13035

Geneseo
John P. Linfoot '58
62 Main Street 14454

John H. Porter '58
4 Oak Street 14454

Hamilton
Anthony J. Pietrafesa '74
Box 1027
Colgate Station 13346

Larchmont
Oliver Barres '39
2 Bayard St. 10538

New York City
Peter M. Capra '53
118 East 93rd Street 10028

Richard C. Gallop '56
Milbank Tweed Hadley McCloy
One Chase Manhattan Plaza
10005

William D. Hart, Jr. '36
Whitman, Ransom & Coulson
522 Fifth Ave. 10036

Sven E. Hsia '59
35 East 85th St. 10028

John D. Lynch '46
J & W Seligman & Co.
65 Broadway 10006

Roger L. Strong '44
30 East 71st St. Apt. 9A
10021

Mrs. Oscar Tang '57
120 East End Ave. Apt. 3C
10028

Oyster Bay
James C. Miller, II '50
MTR-211 Sunset Rd. 11771

Arthur M. Rogers, Jr. '59
Cove Neck Rd. 11711

Pelham
Nathaniel M. Cartmell, Jr. '42
416 Fowler Ave. 10803

Pompey
William M. Tuck
Sweet Road 13138

Rochester
Bruce B. Bates '49
87 Grosvenor Rd. 14610

Barry C. Phelps '49
48 Palmerston Rd. 14618

Syracuse
David D. Jones, Jr. '37
50 Presidential Plaza 13210

David H. Northrup '32
106 Wendell Terrace 13203

NORTH CAROLINA

Chapel Hill
Douglas W. Torrington '63
103 Stateside Drive 27514

Charlotte
E. Osborne Ayscue '51
Helms, Mullis & Johnston
2800 N. C. Nat'l Bank Bldg.
28202

NORTH DAKOTA

Fargo
Thomas L. Powers '20
Box 1958 58102

OHIO

Chagrin Falls
Edward T. Bartlett, III '56
25 West Summit Rd., Front
44022

Cincinnati
Mrs. Richard H. Evans '53
222 Hilltop Lane 45215

Rt. Rev. Henry W. Hobson '10
405 Albion Ave. Glendale
45246

Wilford L. Romney '19
2401 Ingleside Av., Apt. 11E
45206

Cleveland Heights
*Edward D. Yost '47
3137 Fairfax Rd. 44118

Columbus
Gaylord E. Smith '57
1893 Coventry Rd. 43212

Granville
G. Wallace Chessman '37
210 Briarwood Rd. 43023

Kettering
Vernon E. Midgley '42
31 Rue Royale, Suites 1 & 2
45429

Toledo
Peter G. Pappas '63
Room 255
AT&T Long Lines 43624

OKLAHOMA

Bartlesville
Carl M. Elkan '35
3501 Woodlawn Rd. 74003

Tulsa
Mark R. Blankenship '64
7420 East 47th St., South 8
74145

Henry C. Williams '38
5159 East 31st St. 74135

OREGON

Eugene
George H. Hughes '59
Willamette Professional Center
2460 Willamette 97405

Portland
Broughton H. Bishop '45
Pendleton Woolen Mills
218 S. W. Jefferson St. 97201

Frederick J. Kingery, M. D. '45
2250 N. W. Flanders St. 97210

Mrs. David Park '41
12000 S. W. Boones Ferry Rd.
97219

PENNSYLVANIA

Allentown
Charles D. Snelling '49
2949 Greenleaf St. 18104

Bridgeville
John M. Phillips, Jr. '30
Equipco Sales
Phillips Industrial Park
Mayview Road 15017

Bryn Mawr
Mrs. John H. Lewis, Jr. '57
1000 Green Valley St. 19010

Chambersburg
John M. Sharpe, Jr. '46
257 Lincoln Way East 17201

Erie
Edward M. Mead '45
Times Publishing Company
205 West 12th St. 16501

Indiana
Joseph N. Mack '44
134 S. 6th Street 15701

Malvern
John T. Lansing '62
20 Andrews Ave. 19355

Philadelphia
Andres Bacalao '73
Box D-911
3820 Locust Walk 19104

Amory M. Sommaripa, M. D. '48
529 Cresheim Valley Rd. 19118

Pittsburgh
Edward O'Neil '27
P.O. Box 1692 15230

Evans Rose, Jr. '50
Rose, Schmidt and Dixon
Ninth Floor Oliver Bldg. 14222

Mrs. Ferd J. Sauereisen '54
110 Marvelwood Place 15215

Scranton
W. Lanson Chamberlin '34
Chamberlin & Clarke
Northeastern Nat'l Bank Bldg.
18503

Wallingford
David E. Winebrenner '58
401 Golf View Rd. 19086

Waverly
Thomas Rodes '54
Main Street 18471

Jonathan Vipond, III '63
Box 24 18471

Wayne
Robert Schafer '29
730 Mancill Rd. 19087

RHODE ISLAND

Providence
Ms. Beverly Armsden '66
39 George Street 02906

SOUTH CAROLINA

Charleston
Mrs. W. R. Jackson, Jr. '53
19 Water Street 29401

SOUTH DAKOTA

Pine Ridge
Rev. George P. Pierce '49
Box 300 57770

Sioux Falls
Hiram G. Ross '21
Box 423 57101

TENNESSEE

Knoxville
John Muldowny '49
Dept. of History
Univ. of Tenn.
1101 McClung Tower 37916

Memphis
*Peter R. Formanek '62
270 Deloach 38111

Henry Loeb, III '39
365 Colonial Rd. 38117

Nashville
Ms. Sally E. Hamm '68
P. O. Box 1693 Sta. B
37235



TEXAS

Amarillo
Edward L. Roberts '06
2211 Harrison St. 79109

Austin
Austen H. Furse, Jr. '40
6105 Highland Hills Dr. 78731

Dallas
Charles D. Burnside '58
7605 Rambler Road
Windfall 102 75231

N. Bruce Calder '41
1200 Hartford Bldg. 75201

John R. Sears '36
Schneider, Dernet &
Hickman, Inc.
3200 First Nat'l Bank Bldg.
75202

El Paso
John D. Mason, Jr. '42
1223 Rim Road 79902

Fort Worth
Edwin Ryan '49
1105 Hidden Road 76107

Galveston
Stewart G. Wolf, M. D. '31
The Marine Biomedical Inst.
200 University Blvd. 77550

Houston
Thomas J. Keefe '50
803 Soboda Court 77024

Mrs. Robert A. MacLean '53
259 Tamerlaine 77024

UTAH

Salt Lake City
Lincoln D. Clark, M. D. '42
5492 Merlyn Drive 84117

C. Chauncey Hall, M. D. '41
2652 East 6200 South 84121

VERMONT

East Fairfield
William Cruikshank, Jr. '59
R. F. D. 05448

Hyde Park
Cadwallader E. Brooks '59
R. D. 05655

Middlebury
C. Andrew Kaiser '45
Box 707 05753

VIRGINIA

Alexandria
James E. Hinish '56
5301 Essex Ct., Apt. 151
Hamlet Park 22311

Newport News
Conway A. Downing, Jr. '64
220 Prince Drew Rd. 23606

WASHINGTON

Bainbridge Island
Holt W. Webster '39
Rt. 8, Box 8800 98110

Bellevue
Walter S. Kimball, M. D. '30
3407 76th Ave., N. E.
Evergreen Point 98004

Seattle
*Lucius H. Biglow, Jr. '42
1900 Washington Bldg.
1325 4th Ave. 98101

Dr. William H. Hatheway '41
College of Forest Resources
University of Washington 98105

Tacoma
Howard S. Reed '45
7502 North St., S. W. 98498

WEST VIRGINIA

Charleston
William A. Pugh '39
15 Grosscup Rd. 25314

WISCONSIN

Madison
Dr. William F. Dove '54
4142 Mandan Crescent 53711

Dr. John T. Mendenhall '31
140 N. Prospect Ave. 53705

Milwaukee
Robert A. Uihlein, Jr. '34
235 West Galena St. 53212

Racine
John H. Batten, III '31
Twin Disc. Clutch Co.
1328 Racine St. 53403

WYOMING

Casper
J. A. Padon, Jr. '39
P. O. Box 1516 82601

Story
Maurice Leon, Jr. '42
Box 368 82842

Wilson
Meridan H. Bennett '45
Box 33 83014

BERMUDA

Hamilton
Hugh C. Masters '40
P. O. Box 821

CANADA

Calgary, Alberta
Thomas B. Hewitt '39
1600 Royal Bank Bldg.
335 8th Avenue

Kanata, Ontario
James S. Bomba '48
Box 226
24 Tiffany Crescent

Toronto, Ontario
Geoff Perry '65
30 Gloucester St., Apt. 612

CHINA

Hong Kong
W. S. Cheng '60
P. O. Box 20182

ENGLAND

Bucks
Laurence W. M. Viney '38
Hazell, Watson & Viney Ltd.
The Printing Works
Tring Road
Aylesbury

London
William Adams, III '44
26 Hans Court
Hans Road, SW3

Arthur L. Kelly '55
71 Chester Square

FRANCE

LeVesinet
Roger Seymour '44
66 Bis, Rte de Croissy

St. Cloud
Patrick G. Nollet '51
28 Rue des Sablons
78 La Celle





PUERTO RICO

Bayamon
Ricardo A. Gonzalez '53
A13 Argentina Street
Gardenville 00619

Carolina
Guillermo E. Gonzalez, Jr. '50
Leaseway Transportation Corp.
P. O. Box G, Ceramic Annex 00630

Guaynabo
Jorge R. Gonzalez '62
Calle Los Frailes C-4
Urbanizacion Los Frailes 00657

San Juan
Glendon M. Campbell, Jr. '48
Proctor & Gamble
G. P O. Box 3187 00936

SAUDI ARABIA

Riyadh
Frederic C. Thomas, Jr. '46
U. N. Development Programme
P. O. Box 558

SINGAPORE

Marshall P. Cloyd '58
Brown & Root (Singa) Pte., Ltd.
20A-22A, Paterson Road
P. O. Box 104 – Killiney Road

SPAIN

Madrid
Christopher D. Costanzo '59
American Embassy
A. P. O., N. Y. 09794

Carlos M. de la Cruz '59
ANA Teresa, 17
Aravacas

THAILAND

Bangkok
Piya Chakkaphak '48
17/226 Pattanevej 5
Sukhumvit Road 71

VENEZUELA

Caracas
Armando Bacalao '65
Residencias Naiguata, Apt. 9B
La Florida

Dr. Alberto J. Vollmer '42
Edf. Polar-Piso 13
Plaza Venezuela

Valencia
John R. Thompson '41
c/o C. A. Firestone Venezolana
Apartado 194

VIRGIN ISLANDS

St. Thomas
Robert E. Noble '43
Box 5170 00801

WEST GERMANY

Bochum (463)
Edwin Hopkins '56
Gutenbergstrasse





Donald Holman McLean, Jr. '28, LL.B.
elected 1958
elected President 1968
Andover, Massachusetts

Theodore Ryland Sizer
Ph.D., Ped.D., Litt.D.
Clerk
elected 1972
Andover, Massachusetts

Charles Stafford Gage '21, A.M.
Treasurer
elected 1952
elected Treasurer 1966
New Haven, Connecticut

John Usher Monro '30, A.B.
elected 1958
Birmingham, Alabama

Robert Livingston Ireland, III '38, LL.B.
elected 1960
New York, New York

George Herbert Walker Bush '42, A.B.
elected 1967
Washington, D.C.

John Lewis Cooper '31, A.B.
elected 1968
Needham, Massachusetts

Philip Kirkham Allen '29, A.B.
elected 1969
Andover, Massachusetts

Charles Appleton Meyer '35, A.B.
elected 1969
Lake Forest, Illinois

Gerard Piel '33
A.B., D.Sc., Litt.D., L.H.D., LL.D.
elected 1969
New York, New York

William Wade Boeschenstein '44, S.B.
elected 1971
Perrysburg, Ohio

Carol Hardin Kimball, Abbot '53, A.B.
elected 1974
New York, New York

Melville Chapin, '36, J. D.
elected 1974
Cambridge, Massachusetts

Alumni Trustees

Henry Martin Hubshman, Jr. '42, A.B.
elected 1973 for three years
New York, New York

Hillary Paterson Cleveland, Abbot '45, A.M.
elected 1974 for three years
New London, New Hampshire

Genevieve Young Parks, Abbot '48 B. A.
New York, New York

Hubert Clare Fortmiller, Jr. '52, A.M.
Ex Officio for one year as
retiring President of the
Alumni Association
Concord, Massachusetts

Philip Dee Block, III '54, S.B.
Ex Officio for one year as
President of the Alumni
Association
Chicago, Illinois

Gerrit Medbury Keator '57, M.A.T.
Ex Officio for one year as
Chairman of the Alumni Fund
Philadelphia, Pennsylvania

Abbot Trustees

The following former Abbot Academy Trustees will serve with the Phillips Academy Board through June, 1978:

Beverly Brooks Floe, Abbot '41, A.B.
elected 1970
Belmont, Massachusetts

Mary Howard Nutting, Abbot '40, A.B.
elected 1969
Gloucester, Massachusetts

Trustees Emeriti

Sumner Smith '08, A.B.
1956-1960
Lincoln, Massachusetts

Henry Wise Hobson '10
D.D., LL.D.
1937-1966 (President 1947-1966)
Cincinnati, Ohio

James Phinney Baxter, III '10
Ph.D., Litt.D., L.H.D., D.Sc., LL.D.
1942-1966
Williamstown, Massachusetts

Frederick Goodrich Crane '15, A.B.
1963-1968
Lake Forest, Illinois

Stephen Young Hord '17, A.B.
1963-1968
Lake Forest, Illinois

John Peters Stevens, Jr. '15, A.B.
1948-1969 (President 1966-1968)
Edison, New Jersey


15





administration faculty 74-75

Headmaster's Office

Theodore Ryland Sizer, Ph.D., Ped.D., Litt.D.
Headmaster

Peter Quackenbush McKee, Ed.M.
Associate Headmaster

Amy Ramsay Robinson
Administrative Assistant to the Headmaster

Jane Harrison Munroe
Administrative Assistant to the Associate Headmaster

Jerry Foster, A.M.
Director, Complementary Schools Project

Office of the Dean of the Academy

Carolyn Elizabeth Goodwin, A.M.
Dean of the Academy

William Franklin Graham, S.B.
Associate Dean

Carolyn Lumsden Johnston, A.B.
Associate Dean

James Frederick Lynch, A.B.
Registrar

John Clairborne McClement, Ed.M.
Scheduling Officer

Joan F. Schlott
Recorder

Deans of the Residential Clusters

Carroll Wesley Bailey, J.D.
Abbot Cluster

David Owen Cobb, A.B.
Flagstaff Cluster

Frank McCord Eccles, A.M.
West Quadrangle South Cluster

Clement Morell, A.M.
Pine Knoll Cluster

John Richards, II M.A.T.
Rabbit Pond Cluster and Chairman of the Cluster Deans

Nathaniel Baldwin Smith, A.M.
West Quadrangle North Cluster

Office of Admissions and Financial Aid

Joshua Lewis Miner, A.B.
Director of Admissions

Richard Charles Griggs, A.B.
Associate Director of Admissions
Director of Financial Aid

Dalton Hunter McBee, A.B.
Admissions Officer

FACULTY

The date following the degree indicates the year the instructor joined the Andover faculty.

James Ruthven Adriance*
A.B. (1934)
Assistant to the Headmaster

Frederick Scouller Allis, Jr.
A.M., L.H.D. (1936)
Instructor in History and the Social Sciences on the Martha Cochran Foundation
Chairman of the Department of History and the Social Sciences

Samuel Irvine Allison Anderson
A.M. (1968)
Instructor in French

Patricia Prentice Anderson
S.B. (1973)
Instructor in Physical Education

Charles Emory Apgar, III
M.A.T. (1969)
Instructor in Physics

*on leave of absence

Carroll Wesley Bailey
J.D. (1970)
Instructor in English
Dean of Abbot Cluster

Peter Joseph Baleyko
S.B. (1970)
Assistant to the Comptroller

Leslie Ballard
M.A.T. (1973)
Instructor in Chemistry

Marie Madeleine Baratte
A.M. (1973)
Instructor in French
(Abbot Academy, 1946)

Glenn Frank Bastian
A.B. (1972)
Instructor in Biology and English

Keder Bayard
L.L.D., A.M. (1973)
Instructor in Mathematics
(Abbot Academy, 1972)

Yolande Bayard
A.M. (1973)
Instructor in French

Crayton Ward Bedford
A.M. (1962)
Director, School Year Abroad

Francis Emanuel Bellizia, Jr.
A.M. (1970)
Instructor in English

Priscilla Bellizia
(1974)
House Counselor
Eldridge Stuart West

Audrey Nye Bensley
(1973)
Instructor In Art
(Abbot Academy, 1965)

FACULTY (continued)

Gordon Gilmore Bensley
A.B. (1949)
Instructor in Art on the Ammi Wright Lancashire Foundation

George William Best
A.M. (1958)
Instructor in Mathematics

Helen Schneider Best
(1974)
House Counselor
Abbot Stevens East

Carolyn B. Brecher
A.B. (1974)
Instructor in Modern Dance

Ralf Bremermann
A.M. (1973)
Instructor in German

John Frank Bronk
(1958)
Instructor in Physical Education and Physiotherapist

William Hayes Brown
A.M. (1938)
Instructor in English on the Independence Foundation Teaching Endowment

William John Buehner
A.M. (1958)
Instructor in Latin on John Charles Phillips Foundation

Anne Harriss Bugbee
M.A.T. (1973)
Instructor in English
(Abbot Academy, 1959)

James Leighton Bunnell
A.M. (1967)
Instructor in History and the Social Sciences

John Kelvington Burnap
A.B. (1972)
Instructor in Biology



John Patten Chivers
A.M. (1960)
Instructor in German
Chairman of the German Department
Chairman of the Division of Languages

Susan Clark
A.M. (1973)
Instructor in Classics
(Abbot Academy, 1969)

Susan Clarke
A.M. (1973)
Curator of American Art at the Addison Gallery

William Biggs Clift, Jr.
Mus. Ed.B. (1956)
Instructor in Music
Chairman of the Music Department

David Owen Cobb
A.B. (1968)
Instructor in English
Dean of Flagstaff Cluster

Thomas Edward Cone, III
A.M. (1966)
Instructor in Biology
Chairman of the Biology Department

Christopher Capen Cook
M.F.A. (1964)
Instructor in Art
Director of the Addison Gallery of American Art

James Harold Couch
A.M. (1953)
Instructor in Spanish
Chairman of the Spanish Department

Alfred James Coulthard
S.B. (1962)
Instructor in Physical Education

Douglas Everett Crabtree
Ph.D. (1971)
Instructor in Mathematics

Robert Lee Crawford
A.M. (1971)
Instructor in History and the Social Sciences
Co-Director of College Counseling

Linda Cregg
A.M. (1973)
Instructor in French

Paul Barry Crook
A.A. (1969)
Instructor in Physical Education and Psychology
Director of Activities Program

Frank Frederick DiClemente
S.B. (1935)
Instructor in Physical Education

George MacNamara Dix
A.M. (1972)
Instructor in Modern Languages

Joseph Rittenhouse Weir Dodge
A.M. (1944)
Instructor in English

Sherman Frederick Drake
Ed.M. (1953)
Instructor in Mathematics

Robert Dickerson Drennan
A.M. (1974)
Instructor in Anthropology and Associate Director of Robert S. Peabody Foundation

Frank McCord Eccles
A.M. (1956)
Instructor in Mathematics
Dean of West Quad South Cluster

George Howard Edmonds
Ed.M. (1961)
Instructor in English
College Counselor

Patricia Hope Edmonds
A.M.T. (1974)
House Counselor Johnson Hall South

Marion Finbury
A.B. (1973)
Co-Director of College Counseling
(Abbot Academy, 1969)

Sally Elaine Fischbeck
A.B. (1973)
Instructor in Mathematics

Owen J. Flanagan Jr.
Ph.D. (1974)
Instructor in Philosophy

Harper Follansbee*
Ed.M. (1940)
Instructor in Biology on the Samuel Harvey Taylor Foundation

Dianne Moon Foster
A.B. (1974)
House Counselor
Eldridge Stuart East

Jerry Foster
A.M. (1969)
Instructor in English
Director of the Complementary Schools Project

Wayne Andrew Frederick
Ph.M. (1962)
Instructor in History and the Social Sciences on the Emilie Belden Cochran Foundation

John Scanlon Gail
Ed.M. (1973)
Instructor in Social Studies

Ronald Gerard Giguere*
M.A. (1973)
Instructor in French
(Abbot Academy, 1969)



Carolyn Elizabeth Goodwin
A.M. (1973)
Instructor in Mathematics
Dean of the Academy
(Abbot Academy, 1947)

Donald Haverstick Goodyear, Jr.
Ph.D. (1968)
Instructor in English

William Franklin Graham
S.B. (1952)
Instructor in Mathematics
Associate Dean

Richard Charles Griggs
A.B. (1973)
Associate Director of Admissions
Director of Financial Aid
(Abbot Academy, 1969)

*on leave of absence

FACULTY (continued)

Christopher Jude Gurry
A.B. (1974)
Instructor in Physical Education
Instructor in History and the Social Sciences

Norwood Penrose Hallowell, Jr.
A.B. (1934)
Instructor in English and Public Speaking on the Alfred Lawrence Ripley Foundation

Judith Adams Hamilton
A.B. (1974)
House Counselor
Double Brick House

Thomas Robert Hamilton
M.A.T. (1969)
Instructor in Biology

Edmond Emerson Hammond, Jr.
Sc.M. (1953)
Instructor in Mathematics
Chairman of the Mathematics Department

Frank Lee Hannah
A.M. (1968)
Instructor in Mathematics

Douglas Ray Hardin
Ph.D. (1973)
Instructor in Physical Sciences

Fred Harold Harrison
A.M. (1952)
Instructor in History and the Social Sciences
Chairman of the Athletic Department and Director of Athletics

Marjorie Alexander Harrison
A.B. (1973)
Instructor in Physical Education
(Abbot Academy, 1968)

James Calvin Harwood
M.M. (1973)
Instructor in Music

Barbara Hawkes
M.S. (1973)
Instructor in Biology
(Abbot Academy, 1972)

Maury Paul Hepner
Ph.D. (1973)
Instructor in Mathematics

Henry Lynn Herbst
A.M. (1972)
Instructor in French

Sally Herbst
(1974)
House Counselor
Abbot Stevens West

Aloysius John Hobausz
S.B. (1968)
Director of the Audio-Visual Center

Louis John Hoitsma, Jr.
Ed.M. (1953)
Instructor in Mathematics

Robert Penniman Hulburd
A.M. (1953)
Director of Alumni Affairs

Carol Ann Irish
Ph.D. (1973)
Instructor in English

Carolyn Lumsden Johnston
A.B. (1973)
Associate Dean
(Abbot Academy, 1965)

Christine Ronay Johnston
A.M. (1973)
Instructor in Music
(Abbot Academy, 1970)

Dorothy Judd
A.M. (1973)
Instructor in Spanish
(Abbot Academy, 1948)

Paul Kalkstein
M.A.T. (1970)
Instructor in English

Nicholas Van Houten Kip
A.M. (1968)
Instructor in Classics

Christopher Dunbar Kirkland*
A.B. (1968)
Instructor in English





*on leave of absence

Catherine Jeanne Kirkland*
Licence es Lettres, Maîtrise (1970)
Instructor in French
(Abbot Academy, 1968)

Marc Dana Koolen
S.B. (1974)
Instructor in Biology

Georges Nicolas Krivobok
A.M. (1973)
Instructor in French and Russian
(Abbot Academy, 1969)

Mari-Lou Krivobok
(1974)
House Counselor Bancroft Hall

Carl Edward Krumpe, Jr.
A.M. (1960)
Instructor in Classics
Chairman of the Classics Department

Robert Edwin Lane
A.M. (1955)
Instructor in Latin and Russian on the Alfred Ernest Stearns Foundation

Hart Day Leavitt
A.B. (1937)
Instructor in English

Susan M. Lebach
A.M. (1974)
Instructor in English and Foreign Languages

Robert Andrew Lloyd
Arch.M. (1962)
Instructor in Art
Chairman of the Art Department

Susan McIntosh Lloyd
M.A.T. (1973)
Instructor in History and the Social Sciences
(Abbot Academy, 1968)

John Richard Lux
M.S.Ed. (1949)
Instructor in Mathematics
(School Year Abroad, Barcelona 1974-75)

Ellen Canby Lynch
A.B. (1974)
House Counselor
Clement House

James Frederick Lynch
A.B. (1973)
Instructor in Mathematics
Registrar
(Abbot Academy, 1968)

Thomas Tolman Lyons
M.A.T. (1963)
Instructor in History and the Social Sciences

Dalton Hunter McBee
A.B. (1953)
Admissions Officer





FACULTY (continued)

John Claiborne McClement
Ed.M. (1952)
Instructor in Mathematics
Scheduling Officer

Barbara McDonnell
A.B., S.B. (1963)
Director of the Oliver Wendell Holmes Library

Peter Quackenbush McKee
Ed.M. (1947)
Associate Headmaster
Instructor in Physics on the Cecil F. P. Bancroft Foundation
Chairman of the Physics Department

John Kennedy McMurray
M. A. T. (1968)
Instructor in Art

Richard Stockton MacNeish
Ph.D. (1968)
Instructor in Archaeology
Director of the Robert S. Peabody Foundation for Archaeology

William Lawrence Markey*
D.M.L. (1954-57, 1960)
Instructor in French and Italian

Stephen Pike Marx
A.B. (1970)
Instructor in English and Art

Mary Sophia Minard
M.A.L.S. (1973)
Instructor in History and the Social Sciences
(Abbot Academy, 1961)

Joshua Lewis Miner
A.B. (1952)
Director of Admissions

Ronn Nels Minné
Ph.D. (1965)
Instructor in Chemistry
Chairman of the Division of Science

Clement Morell
A.M. (1958)
Instructor in Mathematics
Dean of Pine Knoll Cluster

Michael Edward Mosca
M.B.A. (1966)
Director of Accounting

Marianne Mulholland
B.S. (1974)
House Counselor
Abbey House

William Abbot Munroe
A.B. (1960)
Associate Treasurer

George A. Neilson, Jr.
Ed.M. (1972)
Business Manager

Gunilla Els-Charlotte Emelie Nilsson
M.A.T. (1972)
Instructor in English and Psychology

Daniel Dretzka Olivier
A.M. (1964)
Instructor in French
(Director, School Year Abroad, Rennes, France through 1976-77)

Harold Holmes Owen, Jr.
A.M. (1955)
Instructor in English
Chairman of the Special Committee on Performing Arts

Vincent Pascucci
A.M. (1964)
Instructor in Classics

Frederic Arnold Pease, Jr.
B.D. (1958)
Instructor in Religion
Director of the Community Service Program

David Albert Penner
A.M. (1966)
Instructor in Mathematics

Robert Peter Perrin
Ph.D. (1973)
Instructor in Mathematics and Physics

Stephanie Blake Perrin
M. A. T. (1973)
Instructor in Art and Psychology on the Abbot Academy Association Program
(Abbot Academy, 1968)

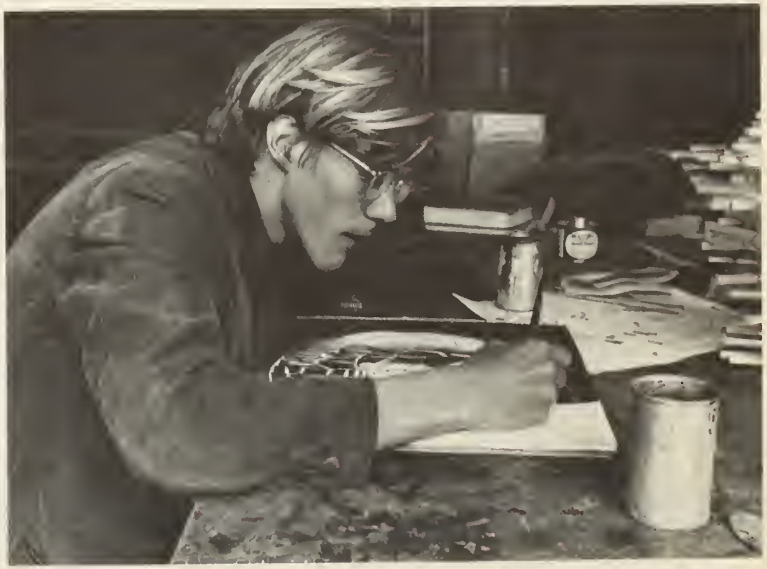
Frederick Almond Peterson*
A.M. (1946)
Instructor in English
Director of Research and Evaluation

Richard Sawyer Pieters
A.M. (1938)
Instructor in Mathematics on the Independence Foundation

Andrew MacLean Plummer
A.B. (1974)
Instructor in French

Virginia Powel*
B. Des. (1973)
Instructor in Art
(Abbot Academy, 1959)

Meredith Price
M. A. T. (1963)
Instructor in English
Dean of Summer Session



*on leave of absence

Edwin Gustavus Quattlebaum, III
Ph.D. (1973)
Instructor in History and the Social Sciences

Elaine Spatz Rabinowitz
M. F. A. (1974)
Instructor in Painting

Thomas Rees
Ph.D. (1960)
Instructor in Chemistry

Thomas Joseph Regan
A.M. (1955)
Instructor in English
Chairman of the English Department

Alexandra Kubler Rewis
M.A.T. (1973)
Counselor and Instructor in Psychology
(Abbot Academy, 1972)

John Richards, II
M. A. T. (1959)
Instructor in History and the Social Sciences
Dean of Rabbit Pond Cluster
Chairman of the Cluster Deans

Shirley Ritchie
S. B. (1973)
Instructor in Physical Education
(Abbot Academy, 1950)

Albert Karl Roehrig
Ed. D. (1954)
Instructor in Psychology
Director of Counseling
Chairman of the Department of Psychology

Lockard Row
M. B. A. (1973)
Comptroller



Harrison Schuyler Royce, Jr.
M. I. A. (1956)
Instructor in History and the Social Sciences

Angel Rubio y Maroto*
A. M. (1965)
Instructor in Spanish

Cristina Alonso Rubio*
(1973) licensed by the Spanish Academy of Performing Arts
Instructor in Dance
(Abbot Academy, 1965)

Jean Mary St. Pierre
A. M. (1973)
Instructor in English
(Abbot Academy, 1963)
(SYA—France, 1974-75)

Edward Jay Sarton
M. S. E. (1972
Instructor in Physics
Chairman of the Andover Evening Study Program

William Louis Schneider
Mus. Ed.B. (1949)
Instructor in Music

Natalie G. Schoor
A.M. (1974)
Instructor in French

Gilbert Tennant Sewall, II
A.M. (1970)
Instructor in History and the Social Sciences

Marie Elizabeth Shaffer
A.B. (1974)
Assistant Director C.S.P.

Richard Eugene Sheahan
(1973)
Associate Secretary of the Academy
(Abbot Academy, 1969)

Gerald Shertzer
M.F.A. (1957)
Instructor in Art

Nancy Faust Sizer
A.M. (1973)
Instructor in History and the Social Sciences

Theodore Ryland Sizer
Ph.D., Ped.D., Litt.D. (1972)
Instructor in History and the Social Sciences
Headmaster

David Marshall Smith
A.M. (1972)
Instructor in English



Nathaniel Baldwin Smith
A.M. (1965)
Instructor in Mathematics
Dean of West Quadrangle North Cluster

John Macdonald Snyder
A.B. (1970)
Instructor in Art
Curator of Photography, Addison Gallery of American Art

Stephen Stanley Sorota
S.B. (1936)
Instructor in Physical Education

Francis Gordon Soule
M.D., F.A.C.P. (1970)
Medical Director

Alanson Perley Stevens, III
A.M. (1962)
Instructor in Russian
Chairman of the Russian Department

Frederic Anness Stott
A.B. (1951)
Secretary of the Academy

Hale Sturges, II
A.M. (1965)
Instructor in French
Chairman of the French Department

Catherine Jane Sullivan
Ed.M. (1973)
Director of Abbot Alumnae Affairs
(Abbot Academy, 1938)

Elwin Sykes
A.B. (1973)
Instructor in English

William Thomas
M.F.A. (1974)
Instructor in Music

John Gibson Tomlinson
S.B. (1966)
Director of Physical Plant

Mary Van Dusen
A.B. (1973)
Instructor in Remedial Language

Jesse Lawrence Vaughan
Th.M. (1972)
Instructor in Religion

Alexander Zabriskie Warren
M.A.L.S. (1963)
Instructor in Mathematics

Theodore John Warren, Jr.
B.D. (1973)
Instructor in Religion
Associate School Minister
(Abbot Academy, 1972)

Philip Brownlie Weld
M.S. (1951)
Instructor in Chemistry and Physics on the George Peabody Foundation
Chairman of the Chemistry Department

Joseph Belleau Wennik
A.M. (1967)
Instructor in German
Director, School Year Abroad 1974-75 Göttingen

Charles Eduardo Whitehead
M.A. (1973)
Instructor in Spanish

Lydia Whitehead
A.B. (1974)
House Counselor Sherman House

Stephen Whitney
A.M. (1936)
Instructor in French on the Elizabeth Milbank Anderson Foundation





Hilda Stroop Whyte
S.B. (1973)
Instructor in Physical Science
(Abbot Academy, 1967)

James Rae Whyte
S.T.M. (1966)
Instructor in Religion
School Minister
Chairman of the Religion Department

Barbara Wicks
(1974)
House Counselor Hall House

Stephen Wicks
(1973)
Instructor in Art
(Abbot Academy, 1972)

Henry Bond Wilmer, Jr.
A.B. (1970)
Instructor in French and Psychology

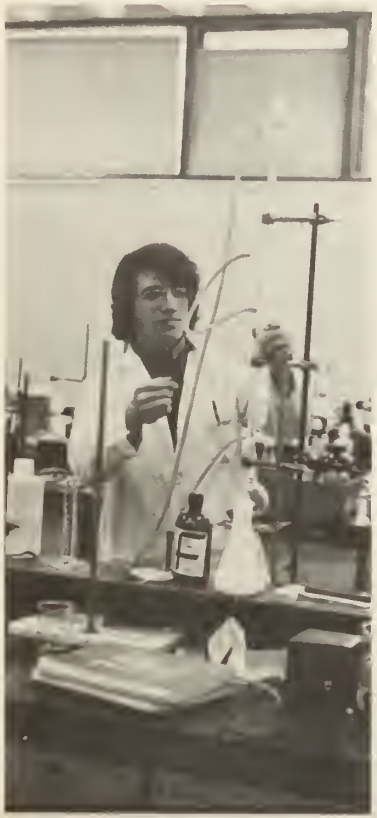
James Robert Wilson
Ph.D. (1967)
Instructor in Chemistry

Kenneth Kelly Wise
A.M. (1966)
Instructor in English

Anne Lise Witten
A.M. (1973)
Instructor in History and the Social Sciences on Jonathan French Foundation
(Abbot Academy, 1955)

Andrew Xenios
M.F.A. (1974)
Instructor in Art

Jack Saul Zucker
A.M. (1970)
Instructor in English



Teaching Fellows

Patrick Michael Collins
A.B. (1974)
Teaching Fellow in Art

Jane Frances Condon
Ed.M. (1974)
Teaching Fellow in English

Anne Detwiler
A.B. (1974)
Teaching Fellow in Classics

William Brinkley Harrison
A.B. (1974)
Teaching Fellow in Mathematics

Ted R. Heavenrich
A.B. (1974)
Teaching Fellow in Mathematics

Joan Adrian Holladay
A.B. (1974)
Teaching Fellow in French

Harriette Jane North
A.B. (1974)
Teaching Fellow in English

Donald Bacon Rollings
A.B. (1974)
Teaching Fellow in Spanish and Administration

Lisa Anne Russell
A.B. (1974)
Teaching Fellow in English

Ronald Dale Thorpe, Jr.
A.B. (1974)
Teaching Fellow in Classics

Sandra Ann Urie
A.B. (1974)
Teaching Fellow in Russian and Administration

Richard Griswold Woolworth, Jr.
A.B. (1974)
Teaching Fellow in History and the Social Studies

Faculty Associates

Yolanda R. Ballou, S.M.
Library Cataloguer

Margaret Couch, A.B.
Reserve Book Librarian

Kathleen Gonsalves, S.B.
Reference Librarian

Alice Hirst, R.N.
Director of Outpatient Department
Isham Infirmary-Hospital

Juliet Richardson Kellogg
Associate Archivist

Robert A. Leete
Manager of the Commons

Evangeline Merriam, A.B.
Technical Supervisor
Language Laboratory

Jeannette Granger Munroe
Hostess at the Underwood Room

Thomas Pool
Assistant Manager of the Commons

Ruth Matthews Roehrig, A.B.
Assistant Director
Audio Visual Center

Ann P. Royce
Assistant in Audio Visual

Carolyn D. Skelton, M.M.
School Organist

Rebecca Sykes
Coordinator of Social Activities

Margaret Towne, S.B.
Circulation Librarian

Sally Slade Warner
Assistant in Music Department

Louis J. Zuppardi
R.T., R.M.T.
Radiology Technologist

Phillips Academy Emeriti

Alice Thacher Whitney
Recorder, Emerita
Andover, 1902-1950

Guy Johnson Forbush, A.B.
Instructor in French, Emeritus
Andover, 1917-1920, 1924-1955

Douglas Mansor Dunbar, A.M.
Instructor in Mathematics, German and Bible, Emeritus
Andover, 1942-1958

M. Lawrence Shields, A.B.
Instructor in Biology and Secretary of the Academy, Emeritus
Marblehead, 1923-1960

Roscoe Edwin Everett Dake, S.B.
Instructor in Chemistry, Emeritus
Andover, 1921-1961

John Kingsbury Colby, A.M.
Instructor in Latin, Emeritus
Andover, 1940-1962

Miles Sturdivant Malone, Ph.D.
Instructor in History, Emeritus
Daytona Beach, Fla. 1937-1962

Elizabeth Eades, A.B.
Director of the Library, Emerita
Williamsburg, Va. 1929-1963

Roger Wolcott Higgins, A.M.
Instructor in English, Emeritus
Andover, 1933-1963

Emory Shelby Basford, A.B.
Instructor in English, Emeritus
Andover, 1929-1964

Floyd Thurston Humphries, A.B.
Instructor in French, Emeritus
Naples, Fla. 1937-1964

John Sedgwick Barss, A.M.
Instructor in Physics, Emeritus
Andover, 1923-1965

Donald Miller Clark, M.D.
Medical Director, Emeritus
Peterborough, N.H. 1954-1965

Elbert Cook Weaver, A.M.
Instructor in Chemistry, Emeritus
Madison, Conn. 1943-1965

George Grenville Benedict, A.M.
Dean of Students, Emeritus
Providence, R.I. 1930-32, 1933-67

Alexander Dunnett Gibson, A.M.
Instructor in French, Emeritus
McIndoe Falls, Vt. 1944-1967

Alan Rogers Blackmer
A.M., L.H.D.
Dean of the Faculty, Emeritus
Andover, 1925-1968

Kenneth Smith Minard, A.M.
Assistant Dean of Students, Emeritus
North Bridgton, Me., 1928-1968

Alfred Graham Baldwin
A.B., B.D., D.D.
Instructor in Religion, Emeritus
Andover, 1930-1968

Douglas Swain Byers, A.M.
Director of the Robert S. Peabody Foundation, Emeritus
Andover, 1933-1968

Cornelius Gordon Schuyler Banta, S.B.
Instructor in Mathematics, Emeritus
Andover, 1944-1968

John Bromham Hawes, Ed.M.
Instructor in English, Emeritus
Weston, Vt. 1933-36, 1939-68

Bartlett Harding Hayes, Jr., A.B.
Director of the Addison Gallery of American Art, Emeritus
Andover, 1933-1969

Frederick Johnson
S.B., Sc.D.
Director of the Robert S. Peabody Foundation, Emeritus
Andover, 1936-1969

Walter Gierasch, A.B.
Instructor in English, Emeritus
Pacific Grove, Calif. 1941-1970

Leonard Frank James, A.M.
Instructor in History, Emeritus
Medomak, Me., 1932-1970

Francis Bertrand McCarthy, A.B.
Instructor in English, Emeritus
Andover, 1941-1970

Alston Hurd Chase, Ph.D.
Instructor in Greek, Latin, and History, Emeritus
Berwick, Me. 1934-1971

George Knight Sanborn, S.B.
Instructor in Mathematics and Biology, Emeritus
Kennebunkport, Me., 1928-1972

James Hooper Grew, D.es L.
Instructor in French, Emeritus
North Andover, 1935-1972

Robert Whittemore Sides, A.B.
Director of Admissions, Emeritus
Marblehead, 1938-1972

Richard Valentine Healy, P.E.
Director of Physical Plant, Emeritus
Winchester, 1956-1972

Allan George Gillingham, Ph.D.
Instructor in Latin and Greek, Emeritus
Rochester, N.H. 1947-1974

Robert Edward Maynard, S.B.
Instructor in Mathematics, Emeritus
Andover, 1931-1974

William Russell Bennett, Jr., A.B.
Registrar, Emeritus
Walpole, Me. 1950-1974

Abbot Academy Emeriti

M. Dorothy Baker
Instructor in English, Emerita
Bath, England 1945-1950

Dorothea Wilkinson
Instructor in English, Emerita
Fredericton, N.H. 1939-1953

Marguerite Capen Hearsey
Headmistress, Emerita
Wellesley 1936-1955

Anna Roth
Instructor in History, Emerita
Franklin 1942-1956

Paul Werner
Instructor in Mathematics, Emeritus
Peterborough, N.H. 1956-1958

Kate Friskin
Instructor in Music, Emerita
Cambridge, 1925-1960

Mildred A. Hatch
Instructor in Latin, Emerita
Chester, N.H. 1946-1961

Harriet E. McKee
Instructor in Latin, Emerita
Harwich Port 1939-1961

Marjorie F. Stevens
Instructor in Mathematics, Emerita
Andover 1945-1961

Alice Curtiss Sweeney
Instructor in English, Emerita
Andover 1935-1961

Raymond Coon
Instructor in Music, Emeritus
Andover 1946-1962

Edith Temple Jones
Instructor in French, Emerita
Fairhaven, Vt. 1954-1967

Germaine Arosa
Instructor in French, Emerita
Essex 1945-1969







"A fantastic place for a serious, conscious person to expand and grow outside of the classroom. The chance to learn and profit from students of different backgrounds, ideals and religions is available for those who take the time to do it."
—Stanley B. Stolz '75

(U) Upper Middler
(L) Lower Middler
(J) Junior

a

Abboud, Labeeb Makram (U)
No. Dartmouth, Mass.

Adams, Philip Vangjel (U)
North Andover, Mass.

Aibel, Daniel Walter (U)
Westport, Conn.

Aiello, Lloyd Paul (L)
Cambridge, Mass.

Aitel, Louise Joyce (U)
Andover, Mass.

Aitken, Michael James (U)
Bronxville, N. Y.

Algrant, Daniel W. (U)
Brookline, Mass.

Allen, Howard D. (U)
Lake Forest, Ill.

Alvero, Ruben John (U)
New York, N. Y.

Ancrum, Cheryl Denise (U)
Brooklyn, New York

Anderson, Gerrit Q. (J)
Jameston, New York

Anderson, Laura B. (U)
Bristol, Conn.

Andresen, Annette (J)
Glen Ellyn, Ill.

Andrews, Jerome Edson III (L)
Andover, Mass.

Androski, Frank J. (U)
No. Andover, Mass.

Androski, Joseph M. (L)
No. Andover, Mass.

Apgar, Lee Scott (J)
Andover, Mass.

Appen, Carolyn N. (U)
Tia Juana, Estado Zulia
Venezuela

Arnold, Stephen J. (J)
New York, N. Y.

Arthurs, Lee Michael (J)
Cambridge, Mass.

Asbury, Anne (J)
Cincinnati, Ohio

Atwood, Bradford T. (U)
E. Sandwich, Mass.

Auguste, Christopher S. (U)
New York, N. Y.

Avila, Eli Narciso (L)
New York, N. Y.

Azzoni, Margaret W. (L)
Huntington, N. Y.

b

Babin, Pamela Ann (L)
W. Falmouth, Mass.

Bacher, Pamela (U)
Guildhall, Vermont

Bailey, Steven Alan (J)
Westville, N. H.

Bain, Laurie Ann (U)
Lowell, Mass.

Baird, William R. (J)
Lincoln, Mass.

Bakalar, Steven D. (J)
Brookline, Mass.

Baker, Emerson Woods II (U)
Fitchburg, Mass.

Balfour, Barbara M. (U)
Montreal, Quebec
Canada

Balshi, Philip John (L)
Bethlehem, Pa.

Bancroft, R. Lundy, Jr. (L)
Amherst, Mass.

Banta, James F. (J)
Ridgewood, N. J.

Barber, John William M. (U)
Middletown, Conn.

Barlow, Elizabeth E. (U)
New York, N. Y.

Barnes, Hope B. (U)
Manchester, Mass.

Barsamian, Lisa P. (U)
No. Andover, Mass.

Barton, Jessica J. (L)
Belle Mead, N. J.

Batal, Michael J. III (J)
No. Andover, Mass.

Batchelder, Benjamin A. (J)
Concord, Mass.

Batt, Douglas A. (J)
Williamsville, N. Y.

Bayard, Mareile Yolande (L)
Phillips Academy

Bedford, Deborah W. (L)
Andover, Mass.

Begley, Peter H. (U)
Stockbridge, Mass.

Beh, Peter C. (L)
Plandome, N. Y.

Benca, Paul Joseph (U)
Berwyn, Ill.

Benner, Robert V. A., Jr. (L)
South Yarmouth, Mass.

Bensley, Christopher (U)
Andover, Mass.

Bensley, Jennifer (J)
Andover, Mass.

Bent, Nathaniel Edward (J)
Gardner, Mass.

Bentley, Barry Lester (L)
Houston, Texas

Bentley, James A., Jr. (L)
Bryn Mawr, Pa.

Benton, Thomas G. (J)
Copake, New York

Bernard, Alicia (L)
New York, N. Y.

Bernard, Steven John (L)
Dracut, Mass.

Berry, Harold J. III (U)
Darien, Conn.

Bessey, Michael T. (J)
Avalon, Calif.

Best, William E. (J)
Andover, Mass.

Bigwood, Russell M. (J)
Wellesley Hills, Mass.

Bissell, Henry E. (U)
Suffield, Conn.

Bissell, Richard W. (J)
New York, N. Y.

Bloom, Derek A. (L)
Worcester, Mass.

Bodenrader, Tami (U)
Andover, Mass.

Boit, Peter G. (L)
Woods Hole, Mass.

Bolduc, Donald F. (U)
Waterville, Maine

Bond, Edith B. (L)
Kingshill P. O. St. Croix
U. S. V. I.

Boochever, T. Sloane W. (U)
Westwood, Mass.

Bosniak, Linda S. (U)
New York, N. Y.

Boswell, Helen T. (U)
Cleveland, Ohio

Boucher, William J., Jr. (U)
Andover, Mass.

Boumil, Thomas M. (U)
Lowell, Mass.

Bourne, Katherine L. (U)
N. Falmouth, Mass.

Bowie, Jocelyn (U)
Bloomington, Ind.

Boyd, Rebecca M. (L)
Bedford, N. Y.

Boylan, Ross D. (L)
New York, N. Y.

Bracy, Jacqueline (L)
Los Angeles, Calif.

Bradley, Kenneth F. (U)
Weston, Mass.

Brainard, Edward C. III (U)
Marion, Mass.

Brayton, John S. (J)
New York, N. Y.

Brennan, Peter J. (J)
Chicago, Ill.

Brescia, Andrew J. (L)
Washington, D. C.

Briggs, John W. (L)
Westport Point, Mass.

Brigham, David Ripley (J)
Wheaton, Ill.

Brodie, Beth Sprague (L)
Duxbury, Mass.

Brooksbank, Christopher J. (L)
Andover, Mass.

Brothers, Bruce C. (L)
Concord, Mass.

Brown, Christopher S. (U)
Corpus Christi, Texas

Brown, Derricke D. (U)
New York, N. Y.

Buchman, Patricia A. (J)
New York, N. Y.

Buck, David A. (L)
Belmont, Mass.

Bull, Harry Calvin (L)
Hinsdale, Ill.

Bunnell, William J. (L)
Andover, Mass.

Burke, John Andrew (U)
Cohasset, Mass.

Burke, Mary G. (L)
New York, N. Y.

Burke, Theodore D. (J)
Lowell, Mass.

Burkert, Claire L. (U)
Milwaukee, Wisconsin

Burnaman, Phillip R. II (L)
Brookville, Pa.

Burnham, Robert L. (U)
Andover, Mass.

Bursztajn, Lilly (J)
Paterson, N. J.

Buttrick, Jerome C. (L)
New York, N. Y.

Buttrick, Mary C. (J)
New York, N. Y.

C

Caldwell, Cary Ames (U)
Andover, Mass.

Cameron, Jo Anne (L)
Methuen, Mass.

Campbell, Duncan M. (L)
Grosse Pointe, Michigan

Canning, Robert Peter (L)
Babylon, New York

Cantor, Alan M. (U)
Putnam, Conn.

Caputo, Mark Louis (L)
Winthrop, Mass.

Cardona, Lillian (J)
Bronx, N. Y.

Carley, Ellen M. (L)
Reading, Mass.

Carley, Margaret I. (J)
Reading, Mass.

Carr, Ethan (U)
New York, N. Y.





Carter, Stephen E. (L)
Nashua, N. H.

Cartier, Veronica I. (U)
New York, N. Y.

Casey, Ann Morton (U)
Fort Carson, Colorado

Castro, Alejandro (U)
Bronx, N. Y.

Castro, Fabian G. (L)
Los Angeles, Calif.

Cate, Dennis Michael (L)
Lawrence, Mass.

Catlin, William W. (U)
Fayetteville, N. Y.

Cavallari, Ford D. (L)
Chelmsford, Mass.

Caverly, Susan K. (U)
Andover, Mass.

Cerrone, Michael A. (U)
Cumberland, Rhode Island

Chadwick, Daniel (U)
Jamestown, N. Y.

Chadwick, George W. (U)
Duxbury, Mass.

Chambers, William N., Jr. (L)
West Lebanon, N. H.

Chang, Julian P. (J)
Hamden, Conn.

Chedekel, Lisa S. (J)
Andover, Mass.

Cheever, Frederic (U)
Ossining, New York

Cheney, James S. (U)
Amherst, Mass.

Cheosakul, Adith (U)
Bangkok 11 Thailand

Chernak, Esther Debra (J)
Andover, Mass.

Chernow, Robert M. (U)
Middleton, N. J.

Chira, Susan D. (U)
Rye, N. Y.

Chory, John H. (U)
Methuen, Mass.

Chotzinoff, Robin (U)
New York, N. Y.

Christmas, Jerryl L. (U)
Evansville, Ind.

Chung, Ann Lih (L)
Salem, Mass.

Churchill, Gregory S. (J)
Ipswich, Mass.

Clark, Dorothy G. (U)
New Haven, Conn.

Clark, James M. (L)
Darien, Conn.

Clason, Wilson B. (J)
1180 Brussels, Belgium

Clejan, Jean-Pierre (L)
New York, N. Y.

Clemenson, Christian D. (U)
Humboldt, Iowa

Cleveland, Sandra E. (U)
APO San Francisco, Calif.

Clinkenbeard, Steven E. (L)
New York, N. Y.

Clowney, William C. (U)
New Vernon, N. J.

Cogan, Elizabeth S. (U)
Lowell, Mass.

Cohan, William D. (L)
Worcester, Mass.



Cohen, Davis S. (U)
Andover, Mass.

Colby, Alfred A. (L)
Marblehead, Mass.

Cole, Christopher A. (L)
Corning, N. Y.

Colella, Stephen R. (U)
Centerville, Mass.

Collery, Peter M. (L)
Amherst, Mass.

Collett, Ellen H. (L)
Marganton, N. C.

Collins, Jennifer G. (L)
New York, N. Y.

Colombo, Robert G. (L)
Lynnfield, Mass.

Colombo, William L. (U)
Lynnfield, Mass.

Combs, F. Gifford (U)
Berkeley, Calif.

Conde, Sebastian A. (U)
Santiago, Chile

Condren, Sloane E. (J)
Woodland Hills, Calif.

Connor, Michael E. (U)
Newburyport, Mass.

Conrad, Edward C. (U)
Riverside, Conn.

Contarino, Carla (L)
North Andover, Mass.

Cook, James R. (J)
Cranford, N. J.

Costin, Patrick S. (L)
Framingham, Mass.

Cox, Gerald Frank (U)
Andover, Mass.

Cox, John O. (L)
Northridge, Calif.

Crawford, Dorothy M. (J)
Greensboro, N. C.

Crawford, Peter R. II (L)
Denver, Colo.

Crichton, John H. (U)
Hillsborough, Calif.

Crowley, Elizabeth E. (L)
Puerto Ordaz, Venezuela

Crowley, Peter M. (L)
Davis, Calif.

Cuevas, Cesar O. (U)
Miami, Fla.

Cullen, Anne M. (U)
Palo Alto, Calif.

Cunningham, Caroline C. (L)
Brookline, Mass.

Cunningham, Eleanor L. (L)
Brookline, Mass.

Curtis, Cassandra T. (U)
Wolfeboro, N. H.

Cushing, John van Gerbig (L)
Wainscott, New York

Cutter, Curtis Brooks (U)
Seville, Spain

d

Daniel, William W. (L)
Washington, D. C.

Daniels, Bryant J. (U)
Andover, Mass.

Daniels, Martha B. (U)
Lincoln, Mass.

Davis, Gregory C. (U)
Ashby, Mass.

Davis, John T. (U)
Jerseyville, Ill.

Day, James Phillip (J)
Lewiston, Maine

Day, Lee Garnett, III (U)
New Canaan, Conn.

DeLucia, David Earl (U)
Andover, Mass.

Dempsey, Timothy D. (U)
Interlaken, N. J.

DeNuzzio, John David D. (L)
Methuen, Mass.

Denzer, Erik M. (U)
Jamaica Plain, Mass.

Desiderato, Laurie L. (U)
New London, Conn.

Deyo, Catherine A. (L)
No. Andover, Mass.

DiIorio, Mark S. (U)
Andover, Mass.

DiPietro, Philip III (U)
Revere, Mass.

Dolgenos, Margaret A. (U)
Pleasantville, New York

Donahue, Duncan A. (U)
Norwell, Mass.

Dorsett, Louis T. H. (L)
Charlotte, N. C.

Douglas, Cameron M. (U)
Chatham, Mass.

Dowd, Lawrence M., II (U)
Andover, Mass.

Dowd, Mary Austin (L)
Andover, Mass.

Downing, Holly Pamela (L)
Minneapolis, Minn.

Downs, Peter Campbell (U)
St. Johnsbury, Vermont

Doyle, Gavin Joseph (U)
Rye Beach, N. H.

Draper, Timothy Cook (U)
Atherton, Cal.

Dumais, David J. (U)
Summit, N. J.

Dupuis, William F. (L)
Lowell, Mass.

Durrett, Bryan P. (L)
Salem, N. H.

Duval, Martha Alicia (L)
Bronx, N. Y.

e

Eaton, Pamela J. (U)
Andover, Mass.

Ehrlich, Virginia (L)
Chestnut Hill, Mass.

Ehrling, Ann-Charlotte E. (U)
Grosse Pointe Park, Mich.

Eich, Edward Keith (U)
Chelsea, Mass.

Elias, Linda Herta (J)
North Andover, Mass.

Ellis, William A. (U)
Gloucester, Mass.

Ellison, Martha K. (J)
Albany, N. Y.

Elmer, Edward Burns (U)
Andover, Mass.

Elson, Charles M. (L)
Atlanta, Georgia

Emery, Charles Fiske (U)
Denver, Col.

Endo, Pamella K. (L)
Monterey Park, Calif.

England, Benjamin M., Jr. (U)
Pittsfield, Mass.

Enriquez-Cabot, Juan (L)
Mexico 20, D. F., Mexico

Erban, Stephen B. (U)
North Andover, Mass.

Eshelman, Henry O. (L)
Lancaster, Pa.

Espinoza, Jose G. (U)
Los Angeles, Calif.

Evans, John Walter (L)
Bedford Hills, N. Y.

Everts, Frederick B. (L)
Mill Valley, Calif.

Ewing, Robert P. (L)
Portland, Maine

f

Farrell, Bowen Cooper (L)
Los Angeles, Calif.

Farrell, John C. (L)
Tamuning, Guam

Fauver, Scribner K. (L)
Elyria, Ohio

Fish, Jason M. (U)
Brooklyn, N. Y.

Fletcher, William M. (U)
Water Mill, New York



Fong, Laurence T. (U)
Princeton, N. J.

Forystek, Michelle D. (L)
Minneapolis, Minnesota

Foster, Franklin W. (U)
Glydon, Md.

Foulke, John H. (L)
Larchmont, N. Y.

Fowkes, Robert J. Jr. (U)
South Boston, Mass.

Fox, Christopher A. (L)
Summit, N. J.

Fraker, Mark R. (U)
Mill Valley, Calif.

Frank, Edwin A. (J)
Boulder, Col.

Frechette, Edward K. (L)
Keene, N. H.

Freed, Katherine (U)
New York, N. Y.

French, John Stuhr (U)
Moline, Ill.

French, Thomas Davies (L)
Andover, Mass.

Fried, Kerry Marie (U)
San Francisco, Calif.

Friese, Elizabeth N. (U)
Pleasantville, N. Y.

Furse, Austen H. III (J)
Austin, Texas

Fusco, Teresa Ann (J)
Lawrence, Mass.

g

Galbiati, James W. (U)
Andover, Mass.

Gangi, Paul Michael (U)
Methuen, Mass.

Garcelon, John Herrick (U)
Killiney Road, Singapore

Genis, Karin L. (U)
Danvers, Mass.

Gifford, Charlotte E. (U)
No. Andover, Mass.

Gilbert, Jeffrey (L)
Darien, Conn.

Gilmour, David L. (U)
N. Y. City N. Y.

Gleason, Amy Louise (U)
Wareham, Mass.

Goldman, Randolph R. (J)
Andover, Mass.

Goldstein, Joseph M. (U)
Andover, Mass.

Goodman, Frank G. (L)
Rye, N. H.

Goodman, Jay Howard (L)
Lawrence, Mass.

Gottsegen, Michael G. (U)
Leominster, Mass.

Gourevitch, Marc Nahum (U)
Middletown, Conn.

Grant, Hallidie (L)
Denver, Col.

Gravitz, Alan Edward (J)
Brooklyn, New York

Green, Priscilla Anne (J)
Andover, Mass.

Greenapple, Steven B. (L)
Roslyn Heights, N. Y.

Greene, George R. (L)
Raleigh, N. C.

Greenfield, Ellen B. (U)
Bronx, N. Y.

Griffith, John Chadwick (U)
APO New York

Griswold, Scott T. (U)
Ridgewood, N. J.

Grunebaum, Alix Sarah (L)
White Plains, N. Y.

Guay, Jeffrey Albert (U)
Wakefield, Mass.

Gutfreund, Nicholas J (L)
New York City, N. Y.

h

Hammond, Natalie J. (U)
Andover, Mass.

Harhen, Robert Paul (U)
Andover, Mass.

Harold, Elizabeth S. (J)
Guilford, Conn.

Harrington, Leslie E. (J)
Beverly, Mass.

Harris, Jonathan B. (J)
Oakland, Calif.

Harrison, Michael K. (U)
Eugene, Oregon

Hartman, Thomas H. (L)
Greenwich, Conn.

Hartshorne, Charles K. (J)
Dedham, Mass.

Hartwell, Charlotte M. (L)
New York, N. Y.

Hartwell, Jill (U)
Wayzata, Minn.

Harvey, Cassandra L. (J)
Bronx, New York

Haslun, William I., II (U)
Granby, Conn.

Hatton, Lydia S. (J)
Grand Haven, Michigan

Heller, Kate L. (U)
New York, N. Y.

Heminger, Daniel W. (U)
St. Petersburg, Fla.

Henderson William D. (L)
Andover, Mass

Herskovits J. S. (J)
Andover, Mass.

Hester, Bettina Ann (U)
Nashville, Tenn.

Hickock, Kimberly R. (L)
Barrington, R. I.

Higgins, John G. (J)
Andover, Mass.

Higginson, Charles Stearns (U)
Washington, D. C.

Higginson, Timothy N. (L)
Washington, D. C.

Hill, Benjamin H. (U)
Houston, Texas

Hill, Elizabeth T. (J)
Exeter, N. H.

Hill, Everett L. (L)
West Point, New York

Hill, Russell R. (U)
Lake Forest, Ill.

Hiroto Jeffrey S. (L)
Los Angeles, Calif.

Ho, Ying-Dat (L)
Sabah, East Malaysia

Hoagland, Elizabeth P. (L)
Alton, Ill.

Hogoboom, John Dale (J)
Shavertown, Pa.

Hoover, Jane C. (U)
North Canton, Ohio

Hoppin, Polly J. (L)
Brookline, Mass.

Horowitz, Charles J. (U)
Scarsdale, N. Y.

Hossain, K. Omar F. (U)
Bolligen Switzerland

Hostetler, David S. (U)
Elkhart, Indiana

Housianitis, Arthur (L)
Lowell, Mass.

Howard, Laurence (U)
Nashville, Tenn.

Howe, Robert Wellman Jr. (U)
Walpole, Mass.

Hsieh, Michael T. (U)
White Plains, N. Y.

Huang, Grace Yumei (L)
Houston, Texas

Hubbell, Jeffrey Lee (L)
Andover, Mass.



Hudner, Raymond T. (L)
South Dartmouth, Mass.

Hulbert, Laura (U)
Brooklyn, N. Y.

Hurlin, James Allen (J)
Andover, Mass.

Hurlin, William John (U)
Andover, Mass.

i

Isbrandtsen, Andree (U)
Riverside, Conn.

Iselin, William Jay II (L)
New York, N. Y.

Isham, Sandra C. (U)
Washington, D. C.

Issenberg, Michael H. (L)
Andover, Mass.

j

James, Steven P. (U)
Methuen, Mass.

Jameson, Susan (L)
New York, N. Y.

Javitch, Jonathan A. (U)
Harrison, Pa.

Jewett, Ellen (L)
New York, N. Y.

Jewett, Harry Mulford (L)
Grosse Pointe Farms, Mich.

Johnson, E. L. (L)
Aruba, Netherlands, Antilles

Johnson, George A., III (J)
New York, N. Y.

Johnson, Lisa Ann (J)
Saginaw, Michigan



Johnson, Todd W. (U)
Nashua, N. H.

Jones, Susanna A. (L)
Cold Spring Harbor, N. Y.

Joslyn, Alison Roux (J)
Andover, Mass.

k

Karlsson, Leif Birger (U)
Providence, R. I.

Katayama, Robert N. (U)
Washington, D. C.

Kaufman, Stephen C. (J)
Gainesville, Fla.

Kazarosian, Paula V. (U)
Haverhill, Mass.

Keeler, Wendy P. (U)
Providence, R. I.

Kemp, Sarah K. (L)
Omaha, Neb.

Kennedy, Jean E. (L)
Omaha, Neb.

Kennedy, Louise A. (U)
Dayton, Ohio

Kenney, Brian J. (U)
Lawrence, Mass.

Kent, Stephen R. (U)
Andover, Mass.

Keogh, Stephen B. (J)
Norwalk, Conn.

Ker, Robert W. (L)
Lookout Mtn., Tenn.

Kilroy, Oliver B. (U)
Tucson, Arizona

Kim, Byung Kook (J)
Andover, Mass.

Kimball, Charles C. II (L)
Chappaqua, New York

Kimball, Joan H. (U)
Ridgefield, Conn.

King, Adrian M. (J)
Dallas, Penn.

Kirby, David N. (U)
New Rochelle, N. Y.

Kjellstrom, Carina B. (U)
Pound Ridge, N. Y.

Knauss, Elizabeth P. (U)
Poughkeepsie, N. Y.

Knight, Elizabeth A. (U)
Sherborn, Mass.

Knowles, James A. (L)
Yarmouth, Maine

Konieczny, Kevin P. (J)
Goffstown, N. H.

Korba, Ellen Ann (U)
Andover, Mass.

Kramer, Laura K. (U)
St. Thomas, U.S. Virgin Islands

Krivibok, Karin F. (U)
Andover, Mass.

Krumpe, Andrew C. (L)
Andover, Mass.

Kubisch, Joan E. (J)
APO New York

Kufferman, David L. (U)
Fairfield, Conn.

Kvan, Jan K. (U)
Bergen, Norway

l

Laidlaw, Francis C. S. (L)
South Lee, Mass.

Lake, Sarah M. (U)
S. Hamilton, Mass.

Landise, Thomas H. (U)
Summit, N. J.

Landsberger, Samuel (U)
Chapel Hill, N. C.

Langlois, Ronald G. (J)
Lowell, Mass.

La Porta, Michael A. (J)
Chicago, Ill.

Large, Thomas H. (U)
Holidaysburg, Pa.

Laverack, Elizabeth (L)
Andover, Mass.

Layton, Isabelle M. S. (J)
Kensington, Maryland

Lebrun, Thomas (J)
Malibu, Calif.

Le Melle, Patrice M. (U)
Tunis, Tunisia

Lenes, Bruce D. (L)
Andover, Mass.

Letsou, Anthea (L)
Lowell, Mass.

Levine, Marc D. (U)
Ridgewood, N. J.

Lewin, David S. (L)
Tucson, Az.

Lewis, Thornton D. (U)
Ridgefield, Conn.

Lieberfeld, Daniel II (L)
New York, N. Y.

Lilley, Douglas T. (U)
Washington, D. C.

Lind, Kate H. (U)
New York, N. Y.

Linehan, Jennifer (U)
Boston, Mass.

Liponis, Mark J. (U)
Andover, Mass.

Little, Heather G. (L)
Bedford Hills, New York

Little, Kate F. (L)
Claremont, Calif.

Liversidge, Paul Colin (J)
Andover, Mass.

Lloyd, Benjamin (L)
Andover, Mass.

Lloyd, Seth (J)
Andover, Mass.

Lockhart, Nancy A. (U)
Peoria, Ill.

Lombardi, Tarky J. (L)
Syracuse, N. Y.

Long, Clifton J. (U)
Shrewsbury, Mass.

Lopez, Richard T. (L)
APO New York

Lord, Amy Holliday (U)
New Britian, Conn.

Lord, Pamela D. (U)
Concord, Mass.

Loughman, Brian W. (L)
Osterville, Mass.

Luhrmann, Tanya M. (U)
Englewood, N. J.

Luis, Elba (J)
San Juan, Puerto Rico

Lynch, Daniel S. (U)
Andover, Mass.

Lyons, John L. (J)
Andover, Mass.

m

McCabe, Robert E., III (U)
Englewood, N. J.

McCarn, Michael J. (U)
Rockville, Md.

McCarthy, Clement A. (L)
Chelmsford, Mass.

McCarthy, William L. (J)
Foxborough, Mass.

McCormick, Sarah E. (U)
Norton, Mass.

McCray, Jennifer A. (U)
New York, N. Y.

McCulloch, Andrew H. (U)
Greenwich, Conn.

McDuffie, C. H. (U)
Bedford Hills, N. Y.

McKee, Patricia (L)
Andover, Mass.

Mac Lean, Sara Grace (L)
Johnson City, Tenn.

McMurtry, M. G. (U)
Englewood, Colo.

Mac Williams, William B. (L)
Gladyne, Pa.

Mackie, Christopher J. (U)
Andover, Mass.

Mahony, Ieun-Gael (J)
Boston, Mass.

Malis, Daniel M. (U)
Lawrence, Mass.

Manos, Kristen L. (U)
Norfolk, Mass.

Manzi, Lisa A. (L)
No. Andover, Mass.

Martignetti, Ronald A. (U)
Winchester, Mass.

Martin, Brian P. (L)
Huron, S. D.

Martin, Martha L. (U)
Amherst, N. H.

Mashabela, Victor L. (U)
Johannesburg, South Africa

Mason, Abigail B. (U)
Providence, R. I.

Mastrangelo, C. L. (J)
Cambridge, Mass.

Mathewson, Judith M. (L)
New York, N. Y.

Matthews, Gary S. (U)
Scarsdale, N. Y.

Maushardt, William W. (J)
San Francisco, Calif.

May, Thomas K. (U)
Washington, D. C.

Maynard, Virginia (L)
Chestnut Hill, Mass.

Mehlman, G. Hamilton (L)
Brookline, Mass.

Melcher, Susan B. (L)
Nashua, N. H.

Merrill, Robert A. (U)
New York, N. Y.

Michailides, E. (J)
Lowell, Mass.

Michaud, Michael D. (J)
Wilmington, Mass.

Middlebrook, Robert G. (U)
Needham Heights, Mass.

Migdol, Jonathan L. (U)
Leominster, Mass.

Milch, Neal B. (U)
Lawrence, N. Y.

Mitchell, Paul A. (J)
Dobbs Ferry, N. Y.

Mleczko, Sarah E. (U)
Wilton, Conn.

Monroe, Stanley J. (J)
Alfred, N. Y.

Monroe, Yvonne L. (U)
Alfred, N. Y.

Moody, Richard B. (L)
Andover, Mass.

Moore, Mitchell T. (U)
Ormond Beach, Fla.

Morgan, Nicholas I. (L)
New York, N. Y.

Morse, Andrew L. (L)
Stamford, Conn.

Morton, Judith B. (J)
Andover, Mass.

Mosca, Edward C. (J)
Lawrence, Mass.

Muldoon, Robert A. (L)
Andover, Mass.

Mullen, Christopher A. (U)
Tampa, Fla.

Muniz, Aurelio (U)
New York City, N. Y.

Munson, Shipley J. (U)
New York, N. Y.

Murdoch, Michael B. (U)
St. Louis, Mo.

Murphy, Dennis F. (U)
Malden, Mass.

n

Nahill, Sharon R. (U)
Methuen, Mass.

Neptune, John R. (J)
New York, N. Y.

Neslo, Hendrik, J. (L)
Brooklyn, N. Y.

Neumann, Lee Duane (U)
Swampscott, Mass.

Neumann, Michael J. G. (L)
South Orange, N. J.

Nguyen, Nguyen Trang (U)
Saigon, South Vietnam

Nicholson, Richard Steven (U)
Sharon, Mass.

Nicholson, Sarah L. (U)
Antigua, West Indies

Nicolosi, Diane M. (U)
Methuen, Mass.

Nordell, John R. (L)
Cambridge, Mass.

Norman, Margaret (U)
Palisades, N. Y.

North, Cecil J. (L)
Mt. Kisco, N. Y.

Nourse, Victoria F. (U)
Marblehead, Mass.

Novick, Andrew C. (U)
North Dartmouth, Mass.

o

Oberbeck, Frances K. (U)
Englewood, N. J.

O'Brien, Kelly S. (U)
Melrose, Mass.

O'Donnell, Julie (U)
Cedar Rapids, Iowa

O'Hara, Richard S. (J)
Andover, Mass.

Okada, Shunichiro (L)
Republic of Singapore

Oliva, Mark (J)
Gates Mills, Ohio

Olson, Jonathan Y. (J)
New York, N. Y.

Ordway, C. (U)
Hickory Corners, Mont.

Owen, Harold H. III (J)
Andover, Mass.

p

Palmer, William E. (U)
Rector, Pa.

Panagiotakos, Steven C. (J)
Lowell, Mass.

Paradis, David H. (L)
Louisville, Ky.

Park. Lisa Chase (L)
Portland, Oregon

Parker, Elizabeth A. (U)
New York, N. Y.

Parmelee, Jennifer B. (U)
Greenwich, Conn.

Parsons, Laurie B. (L)
Bedford Hills, N. Y.

Partington, B. James (U)
New York, N. Y.

Pascale, Lia N. R. (U)
Canton, Ohio

Pascucci, V. Scott (U)
Andover, Mass.

Patterson, George W., IV (J)
Andover, Mass.

Pawlowski, Ann M. (U)
Lynnfield, Mass.

Pawlowski, Carol A. (U)
Cumberland, Maryland

Pease, Ruth E. (L)
Andover, Mass.

Peck, Jennifer L. (U)
Barnard, Vermont

Peck, Perry A. (U)
Perrysburg, Ohio

Penick, Sydnor B. (U)
Princeton, N. J.

Perley, Jefferson G. (L)
Concord, Mass.

Pettus, Anne T. (U)
Keysville, Virginia

Phillips, Richard L. (U)
Little Rock, Ark.

Phipps, Howard, III (U)
Westbury, N. Y.

Piel, Eleanor J. II (L)
New York City, N. Y.

Pierce. Mark D. (L)
London, S. W. 3 England

Pinero, Edwin (U)
Bronx, N. Y.

Pires, Anthony T. Jr. (J)
Norton, Mass.

Polson, Christopher G. (L)
Barrington, R. I.

Pool, Adam deSola (U)
Cambridge, Mass.

Porter, Annette (L)
Caracas, Venezuela

Porter, Priscilla C. (U)
Durham, N. C.

Posey, Robert S. (J)
New Orleans, Louisiana

Potash, Patricia A. (L)
Dalton, Mass.

Pozzy, Theo M. (J)
Bangor, Maine

Prentakis, Constantine (U)
Lowell, Mass.

Price, John C. (U)
State College, Pa.

Pucillo, John (J)
East Braintree, Mass.

Pulley, Robert P. (U)
Coventry, R. I.

Putney, Robert E., III (J)
Jenkintown, Pa.

Pyun, Eumi (L)
Andover, Mass.

r

Randolph, C. B. (L)
Chestnut Hill, Mass.

Randolph, Garret A. (L)
Chevy Chase, Md.

Raymond, Allen E. (U)
Litchfield, Conn.

Regan, William J. (J)
Andover, Mass.

Remeis, Paul J. (U)
Andover, Mass.

Renner, Curtis (U)
APO New York

Reuben, Jeffrey L. (J)
Oak Brook, Ill.

Reymond, Merry Ellen (L)
Gloucester, Mass.

Reynolds, Andrea E. (U)
Guilford, Conn.

Reynolds, Joshua R. (J)
Andover, Mass.

Rhangos, William C., Jr. (U)
Savannah, Ga.

Richards, Pamela M. (U)
Andover, Mass.

Richardson, R. Hunt (L)
New York, N. Y.

Richman, Nancy E. (U)
Short Hills, N. J.

Rifkind, Barbara (U)
New York, N. Y.

Riker, Richard S. (L)
New York, N. Y.

Risk, Victoria R. (U)
West Cummington, Mass.

Rivera, Ileana (L)
Brooklyn, N. Y.

Rivera, Jose M. (L)
New York, N. Y.

Rivers, Brian J. H. (U)
New York, N. Y.

Robbins, Dale (L)
Newton Lower Falls, Mass.

Roberts, Clarisse deRham (U)
Princeton, N. J.

Robertz, Paul J. (L)
St. Peter, Minn.

Robinson, Carol E. (J)
Brooklyn, N. Y.

Robinson, Wayne E. Jr. (J)
Boulder, Col.

Rockefeller, Ben W. (U)
Washington, D. C.

Rockwell, Nancy C. (U)
Weston, Conn.

Rockwell, William B. (U)
North Andover, Mass.

Rodgers, William F. L. (J)
Andover, Mass.

Rodriguez, Pedro A. (U)
Santo Domingo, Dominican Republic

Rokous, John J. (U)
No. Andover, Mass.

Rolett, Barry V. (U)
Los Angeles, Calif.

Rome, Laura E. (U)
Leominster, Mass.

Ronan, Kathryn E. (U)
Marblehead, Mass.

Roscoe, Elizabeth K. (U)
Hingham, Mass.

Rosen, Debora A. (U)
Weston, Mass.

Rosenberg, Neil J. (U)
Andover, Mass.

Rosenfeld, Steven (L)
Lawrence, Mass.

Rosenthal, John G. (U)
St. Louis, Mo.

Ross, Caleb D. (L)
Cambridge, Mass.

Rouse, Roger D. (U)
Dayton, Ohio

Row, Walter A. (U)
Weston, Mass.

Roy, Sunanda (J)
Chapel Hill, N. C.

Rush, Naomi I. (U)
Englewood, N. J.

Russell, Miranda E. (L)
Lancaster, Pa.

Ryan, Ronald D. (J)
Caracas Venezuela, S.A.

S

Sack, Emily Joan (U)
Marblehead, Mass.

St. Louis, Peter (U)
Methuen, Mass.

Salinger, Matthew R. (J)
Windsor, Vt.

Salvo, Joseph J. (U)
Lawrence, Mass.

Samsel, Richard W. (L)
Pittsfield, Mass.

Sawyer, G. Elizabeth E. (U)
Mickletown, Ohio

Schaff, Isabel H. (L)
Sewickley, Pa.

Schaff, Peter H. (U)
Youngstown, Ohio

Scheer, William R. (U)
Poughkeepsie, N. Y.

Scheerer, Laura L. (L)
New York City, N. Y.

Schiewetz, Mark B. (U)
Wilmington, Delaware

Schofield, Thomas (U)
Weston, Mass.

Schramel, Gregory L. (J)
New Orleans, La.

Schueler, Charles R., Jr. (J)
Brookline, Mass.

Schwartz, Pamela S. (U)
Andover, Mass.



Schwerin, Noel M. (L)
Locust Valley, N. Y.

Scott, Pamela C. (L)
Fairfield, Ct.

Segal, Deborah C. (L)
No. Andover, Mass.

Seiden, Timothy G. (L)
New York, N. Y.

Sellers, William Raj (J)
Reading, Mass.

Senior, Elizabeth A. (U)
Middlebury, Conn.

Senior, Paul D. (L)
Newtonville, Mass.

Shaffer, Jill M. (U)
Trenton, N. J.

Shaw, Stuart C. (J)
New Canaan, Conn.

Shea, Joseph F. (J)
Lowell, Mass.

Sheahan, Caroline (J)
Andover, Mass.

Sheffield, Eulah W. (L)
Middletown, R. I.

Shellman, Michael J. (L)
Norwalk, Conn.

Sherman, Joseph M. (U)
Stamford, Conn.

Shertzer, Amy R. (J)
Andover, Mass.

Shin, Miho (U)
Seoul, Korea

Shionis, Mark C. (U)
Andover, Mass.

Shoemaker, John N. Jr. (U)
Wyoming, Pa.

Shon, Richard C. (U)
Naha, Okinawa, Japan

Sideri, Stephen E. (L)
No. Andover, Mass.

Siderides, Elizabeth (L)
Stamford, Conn.

Siragusa, Ross D. III (U)
Lake Forest, Ill.

Sirois, Kevin P. (J)
Andover, Mass.

Sizer, Judith R. (L)
Andover, Mass.

Slade, Shelley R. (U)
New York, N. Y.

Slater, Steven D. (U)
Andover, Mass.

Smith, Debra J. (U)
Cleveland, Ohio

Smith, Elizabeth C. (U)
New Haven, Conn.

Smith, Richard N. (U)
New York, N. Y.

Smith, Thorn M. (U)
Peoria, Ill.

Smythe, Robert J. (J)
Andover, Mass.

Snedeker, Brian W. (J)
Andover, Mass.

Sobil, Marc J. (U)
Lawrence, Mass.

Solomon, Roslyn J. (L)
Bellingham, Wash.

Solovay, Michael B. (L)
Westport, Conn.

Somers, Michael E. (L)
Olympia Fields, Ill.

Sonnabend, Wendy (L)
Brookline, Mass.

Sonnier, Elizabeth (L)
No. Andover, Mass.

Spader, James T. (J)
No. Andover, Mass.

Spencer, Robert D. (L)
Ross, Calif.

Spiegel, Lisa A. (U)
Andover, Mass.

Spound, David A. (U)
Leominster, Mass.

Staley, Robert H. (J)
Prairie Village, Kansas

Starratt, Richard W. (L)
San Francisco, Calif.

Stein, Peter M. (L)
Scarsdale, N. Y.

Stephens, Robert K., Jr. (J)
Andover, Mass.

Stevens, Lenhardt S. (U)
Portland, Oregon

Stevens, Sandra J. (U)
Culver City, Calif.

Stevens, Seth R. (U)
Kansas City, Mo.

Stevenson, Walker (L)
Niantic, Conn.

Stites, Louise P. (U)
Louisville, Ky.

Stone, Dan G. (U)
Centerport, N. Y.

Stowe, Darryl W. (L)
Carlisle, Mass.

Strauss, Nicholas C. (J)
Providence, R. I.

Strayer, Ann L. (J)
Yarmouthport, Mass.

Street, Oswald C. (U)
Chelmsford, Mass.

Strong, Denise R. (L)
Tower, Minn.

Suisman, Charles A. (U)
West Hartford, Conn.

Sullivan, Gregory F. (U)
Greenwich, Conn.

Suslovic, Edward J. (L)
Methuen, Mass.

Sweaney, M. Joseph (L)
Omaha, Nebraska

Sweeney, John C. (U)
Concord, Mass.

Sutherland, Barbara (L)
Darien, Conn.

Sutherland, Paige C. (L)
Glen Head, N. Y.

Swett, Benjamin C. (L)
Purdy's Station, N. Y.

Swingholm, Gregory A. (L)
Aruba, Netherlands Antilles

Sylvester, John A. (J)
Tromso, Norway

t

Tavenner, Lisa A. (J)
Andover, Mass.

Tay, Wendy J. (L)
Andover, Mass.





Taylor, Michael D. (L)
Henderson, N. C.

Taylor, Sandra L. (U)
Dhahran, Saudi Arabia

Terranova, Louis D. (J)
Andover, Mass.

Thomas, Anita M. (U)
Andover, Mass.

Thompson, Bruce R. (J)
Lima, Ohio

Thompson, Frederick G., IV (L)
St. Joseph, Mo.

Thompson, Michelle A. (J)
Mattapan, Mass.

Thornton, Hugh W. (J)
New York, N. Y.

Tierney, Peter J. (U)
Cambridge, Mass.

Tilghman, James W. (J)
Peterborough, N. H.

Tobeason, Hans F. (U)
Far Hills, N. J.

Tobeason, Peter F. (J)
Far Hills, N. J.

Tombropoulos, George K. (U)
Richland, Wash.

Toole, Edward S. (L)
North Haven, Conn.

Torres, Walter A. (J)
New York City, N. Y.

Townsend, Thatcher L., III (U)
Winston-Salem, N. C.

Trafton, John W. (U)
Auburn, Maine

Trairatanobhas, Sombat (U)
Bangkok, Thailand

Turner, Darryl D. (U)
Cleveland, Ohio

Tuttle, Garrett M. (U)
Darien, Conn.

Tydings, Millard E., II (U)
Havre de Grace, Maryland

Tyson, Albert D. (L)
Jeddah, Saudi Arabia

u

Upton, Mark C. (L)
Bowling Green, Va.

v

Vaillant, George E. (L)
Cambridge, Mass.

Van Buren, Thomas P. (L)
Princeton, N. J.

Van Cleve, Peter D. (U)
St. Louis, Mo.

Vaughan, John W., Jr. (U)
Chelsea, Mass.

Ventre, Peter B. (L)
Methuen, Mass.

Virgili, Jorge (L)
New York, N. Y.

Vitalis, William N. (L)
New York, N. Y.

w

Wagner, Craig B. (U)
Danville, Ill.

Waldner, Lars C. (L)
Downers Grove, Ill.

Walker, Todd F. (L)
Erie, Pa.

Walker, Wendy W. (U)
New York, N. Y.

Walsh, Courtney C. (J)
Easton, Maryland

Wang, Fong (U)
Lexington, Mass.

Wang, James Kuo-Chang, Jr. (L)
No. Scituate, R. I.

Warner, Virginia S. (L)
Washington, D. C.

Wartels, Michael B. (L)
New York, N. Y.

Washington, Maria A. (U)
Oklahoma City, Okla.

Waterman, Dana S. (U)
Narragansett, R. I.

Watson, Linda Lu (U)
No. Canton, Ohio

Watson, Michael D. (L)
Brunswick, Maine

Weld, Daniel S. (J)
Andover, Mass.

Wellman, Katherine F. (U)
Bangor, Maine

Wexler, William A. (L)
Weston, Mass.

Wheeler, Paul R. (L)
Chelsea, Mass.





Wheeler, Walter H. (L)
Stamford, Conn.

White, Ann R. (U)
Andover, Mass.

White, Heather S. (U)
Amherst, Mass.

Whittemore, David S. (J)
Morris Plains, N. J.

Wicker, Thomas G. Jr. (L)
Washington, D. C.

Wilburn, Richard A. (U)
Chelsea, Mass.

Wiley, Cynthia J. (L)
Bethesda, Md.

Williams, Scott S. (L)
Seattle, Wash.

Wilson, Bruce (L)
Winston-Salem, N. C.

Wilson, Steven H. (L)
Quogue, N. Y.

Winn, Mary M. (J)
Andover, Mass.

Wiseman, Anne M. (L)
Andover, Mass.

Woerner, Scott W. (U)
Lake Forest, Ill.

Wolohojian, Gabrielle R. (J)
Milltown, N. J.

Worth, Rich H., Jr. (J)
Edgartown, Mass.

Worthington, Samuel A. (U)
Valais, Switzerland

Wroble, Lori A. (L)
So. Dartmouth, Mass.





Wyckoff, Winston W. (J)
Chariton, Iowa

Y

Yarvis, Lori Ann (J)
Long Beach, N. Y.

Yett, Andrew I. (U)
Woburn, Mass.

Young, Steven G. (J)
E. Taunton, Mass.

Yun, William Y. (L)
Havre de Grace, Md.

Z

Zen, Emile S. (L)
New York, N. Y.

Zisk, Stephen R. (U)
Lexington, Mass.

Zogbaum, Wilfrid E. (J)
New York, N. Y.

Zubair, Abu Bin M. (L)
Dacca-5, Bangladesh

Zucker, Laurie M. (U)
Andover, Mass.






86
71
12
75

statistical 74-75 information

GEOGRAPHICAL DISTRIBUTION

Alabama	2
Arizona	3
Arkansas	1
California	42
Colorado	11
Connecticut	74
Delaware	1
District of Columbia	16
Florida	12
Georgia	1
Illinois	26
Indiana	4
Iowa	5
Kansas	3
Kentucky	4
Louisiana	3
Maine	13
Maryland	11
Massachusetts	404
Michigan	9
Minnesota	7
Mississippi	1
Missouri	5
Nebraska	6
New Hampshire	14
New Jersey	56
New York	215
North Carolina	21
Ohio	22
Oklahoma	2
Oregon	8
Pennsylvania	25
Rhode Island	16
South Carolina	1
South Dakota	1
Tennessee	5
Texas	10
Vermont	4
Washington	8
West Virginia	1
Wisconsin	2
Wyoming	1

Africa	1
Antilles	4
Arabian Gulf	1
Bahamas	1
Bangladesh	1
Bermuda	1
Canada	4
Chile	1
England	2
France	1
Germany	2
Mexico	1
Norway	1
Puerto Rico	1
Singapore	1
Saudi Arabia	2
South Vietnam	1
Switzerland	2
Taiwan	1
Thailand	3
Tunisia	1
Venezuela	5
Virgin Islands	4
West Indies	4
	1124

	Total	Boys	Girls
Seniors	383	265	118
Uppers	353	228	125
Lowers	245	161	84
Juniors	143	103	40
Total Students	1124	757	367

Boarding Students	940
Day Students	184
	1124





College Counseling Office

Phillips Academy's long and proud history has been mirrored in the excellent record it has had in college admissions. Although the college admissions picture is entirely different and infinitely more complex now than it was in past decades, our students continue to present a strong record. Competition for admission to selective schools is rigorous and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself in the most satisfying manner. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of schools that makes sense.

Admission to colleges is not based on a student's mere presence in a competitive academic community such as this one, but is based on how well the student has used this experience. Secondary schools can no longer get students into college, but we know that we can prepare them academically and socially. It is certainly true that many of our students do gain entrance into the most selective schools in the country, and that Andover is held in high regard by colleges and universities throughout the country.

The Class of 1975 applied to 187 different colleges and will matriculate next fall in approximately 115 different colleges and universities across the country.

COLLEGE ADMISSIONS FOR THE CLASS OF 1974

College	Admitted	Matriculating
Amherst	13	8
Col. of the Atlantic	1	1
Bard	2	1
Barnard	3	1
Beloit	4	1
Bennington	2	2
Boston Conservatory of Music	1	1
Boston College	11	4
Boston Univ.	13	2
Bowdoin	6	2
Brandeis	10	3
Brown	29	12
Bryn Mawr	3	1
Bucknell	4	1
Univ. of Calif. Berkeley	5	2
Santa Barbara	4	1
Santa Cruz	2	1
Carleton	14	2
Univ. of Chicago	2	1
Claremont Men's	4	2
Clark	6	1
Colby	13	2
Colgate	10	5
Colorado College	7	6
Univ. of Colo.	2	2
Columbia	14	1
Connecticut	10	2
Cornell	17	7
Dartmouth	27	17
Dickinson	7	1
Duke	14	7
Earlham	2	1
Eckerd	1	1
Univ. of Fla.	1	1
Franklin & Marshall	7	1
Georgetown	15	4
George Washington	7	2
Grinnell	3	2
Hamilton	1	1
Harvard	37	22
Haverford	3	2
Hobart	4	2
Ithaca	2	1
Johns Hopkins	18	4
Kirkland	3	1
Lafayette	5	2
Lawrence	4	2
Lehigh	7	1
McGill	3	2
Macalaster	3	2
Univ. of Maine	2	1
Univ. of Mass.	23	6
M.I.T.	11	7
Univ. of Miami	2	1
Univ. of Mich.	9	1
Middlebury	11	8
Mills	1	1
Univ. of Nebraska	1	1
New England College	1	1
Univ. Of N.H.	14	5
State Univ. of New York Stonybrook	3	1
Univ. of North Carolina Chapel Hill	8	5
Northeastern	4	1
Northwestern	34	6
Notre Dame	2	1
Oberlin	7	2
Occidental	11	2
Oxford Univ., England		
New College	1	1
Univ. of Penn.	49	19
Pine Manor	1	1
Princeton	21	7
Radcliffe	8	5
Rensselaer Polytechnic Inst.	9	2
Rice	4	3
Univ. of Rochester	12	6
St. Anslem's	1	1
Univ. of Santa Clara	1	1
Smith	6	4
Stanford	23	14
Swarthmore	3	2
Syracuse	4	1
Univ. of Texas	3	2
Trinity	13	5
Tufts	17	6
Tulane	6	2
Union	7	3
Vanderbilt	13	5
Vassar	12	3
Univ. of Vermont	10	4
Univ. of Va.	9	2
Wabash	4	3
Washington Univ.	2	1
Washington & Lee	4	4
Wellesley	3	1
Wesleyan	12	7
Wheelock	3	2
Williams	11	7
William & Mary	2	1
William Smith	9	2
Yale	38	15

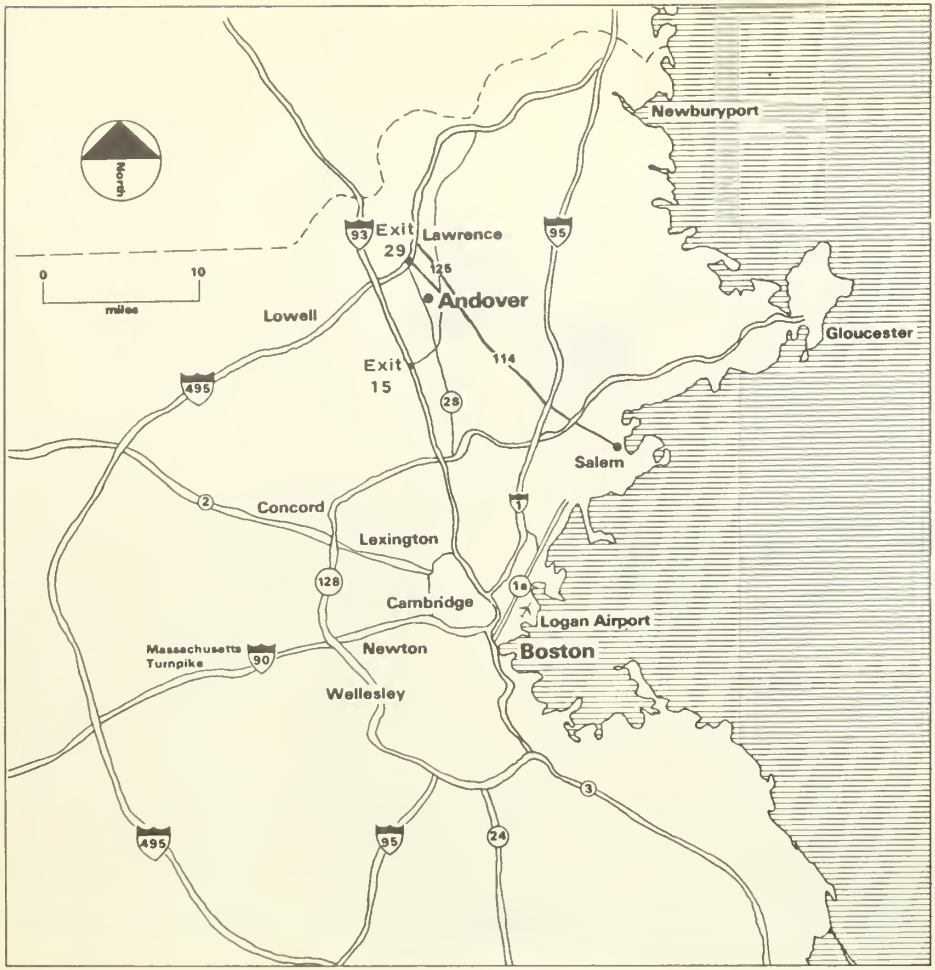


INDEX TO BUILDINGS

51 Abbey House*
58 Abbot Hall (Art)
38 Abbot House*
22 Adams Hall*
74 Addison Art Gallery
66 Alumni House
62 America House*
34 Andover Cottage*
75 Andover Inn
76 Arts Center
28 Bancroft Hall*
3 Bartlett Hall*
12 Benner House (Snack Bar)
25 Bishop Hall*
16 Borden and Memorial Gymnasium
14 Bulfinch Hall (English)
18 Case Memorial Cage
40 Chapin House*
29 Churchill House*
71 Cochran Chapel
11 Commons (Dining Hall)
19 Cooley House
61 Coy House
53 Cutler House
10 Day Hall*
55 Draper Cottage*
52 Draper Hall*
32 Eaton Cottage*
83 Eldridge Stuart House*
68 Engineering Building
2 Evans Hall (Science)
59 Flagg House*
84 Foxcroft Hall*
72 French Hall*
65 French House*
7 Frost House*
81 Fuess House*
47 G.E. Abbot Gymnasium
78 George Washington Hall
69 Graham House (Psychology)
43 Graves Hall (Music)
70 Green House*
48 Hall House*
13 Hardy House **(Admissions Office)**
60 Homestead
27 Isham Infirmary
24 Johnson Hall*
41 Junior House*
46 Laundry
56 McKeen Building (History)
45 Maintenance Shop
15 Memorial Bell Tower
4 Morse Hall (Mathematics)
63 Morton House (Alumnae)
80 Nathan Hale House*
20 Newman House*
64 Number 4 Morton Street
8 Oliver Wendell Holmes Library
37 Park House*
6 Paul Revere Hall*
35 Peabody House
5 Pearson Hall (Classics)
31 Pease House*
30 Pemberton Cottage*
33 Phelps House
44 Power Plant
36 R.S. Peabody Foundation and Archaeological Museum
54 Ripley House
26 Rockwell Hall*
67 Samaritan House
1 Samuel Phillips Hall
50 Sherman House*
9 Smith House*
77 Stearns House*
79 Stevens House*
82 Stimson House*
42 Stott Cottage*
73 Stowe House*
21 Stuart House*
17 Sumner Smith Memorial Hockey Rink
49 Sunset Lodge
23 Taylor Hall*
39 Williams Hall*

*Dormitory


North
Admissions Office
Chapel Avenue
Salem Street
Main Street
← to Lawrence
to Boston →
128
School Street
Abbot Street
Phillips Street
Andover



Traveling to Andover

The Trombly Motor Coach Service runs buses to Andover from the Continental Trailways Bus Terminal, 10 Park Square, Boston. At the time this catalog went to press, busses ran every hour, 7:30 a.m.–11:00 p.m., Monday through Saturday, and from 11:00 a.m. to 5:00 p.m. on Sunday. Visitors should call the bus terminal in Boston, 482-6620, for up-to-date information.

If travelling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus.

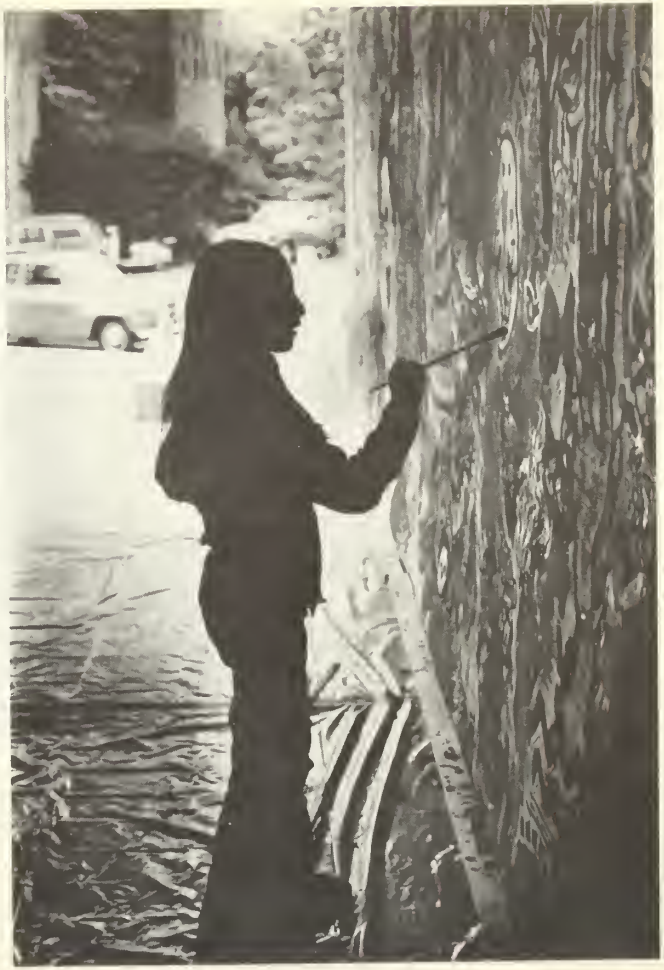
If driving from Logan Airport, go through the Sumner Tunnel and follow Route 93 north signs.

Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
Telephone 475-5903

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
Telephone 475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Rd.,
No. Andover
Telephone 688-1851



Printed by: *DBL ASSOCIATES, COMMERCIAL PRINTERS*
Corner of Elm & Water Streets
North Andover, Mass. 01845

Please tear this preliminary application form along perforation and mail with application fee in envelope provided. For complete application procedure, see Admissions section of this catalog.

PRELIMINARY APPLICATION

For entrance in September, 19____

Will you apply for financial aid?

Class applied for:

- ☐ Junior (9th grade)
- ☐ Lower Middle (10th grade)
- ☐ Upper Middle (11th grade)
- ☐ Senior (12th grade)
- ☐ Postgraduate

The required $10.00 application fee should accompany this form. Make checks payable to the Trustees of Phillips Academy.

Phillips Academy
Andover, Massachusetts 01810

Candidate's name _____
first middle last

Date of birth _____ ☐ male ☐ female Nickname _____

Name of parent or guardian _____

Permanent address _____
street city state zip

Mailing address _____
street city state zip

Other address _____
street city state zip

Area Code _____ Telephone number _____

☐ Check if you have relatives now or previously at Andover.

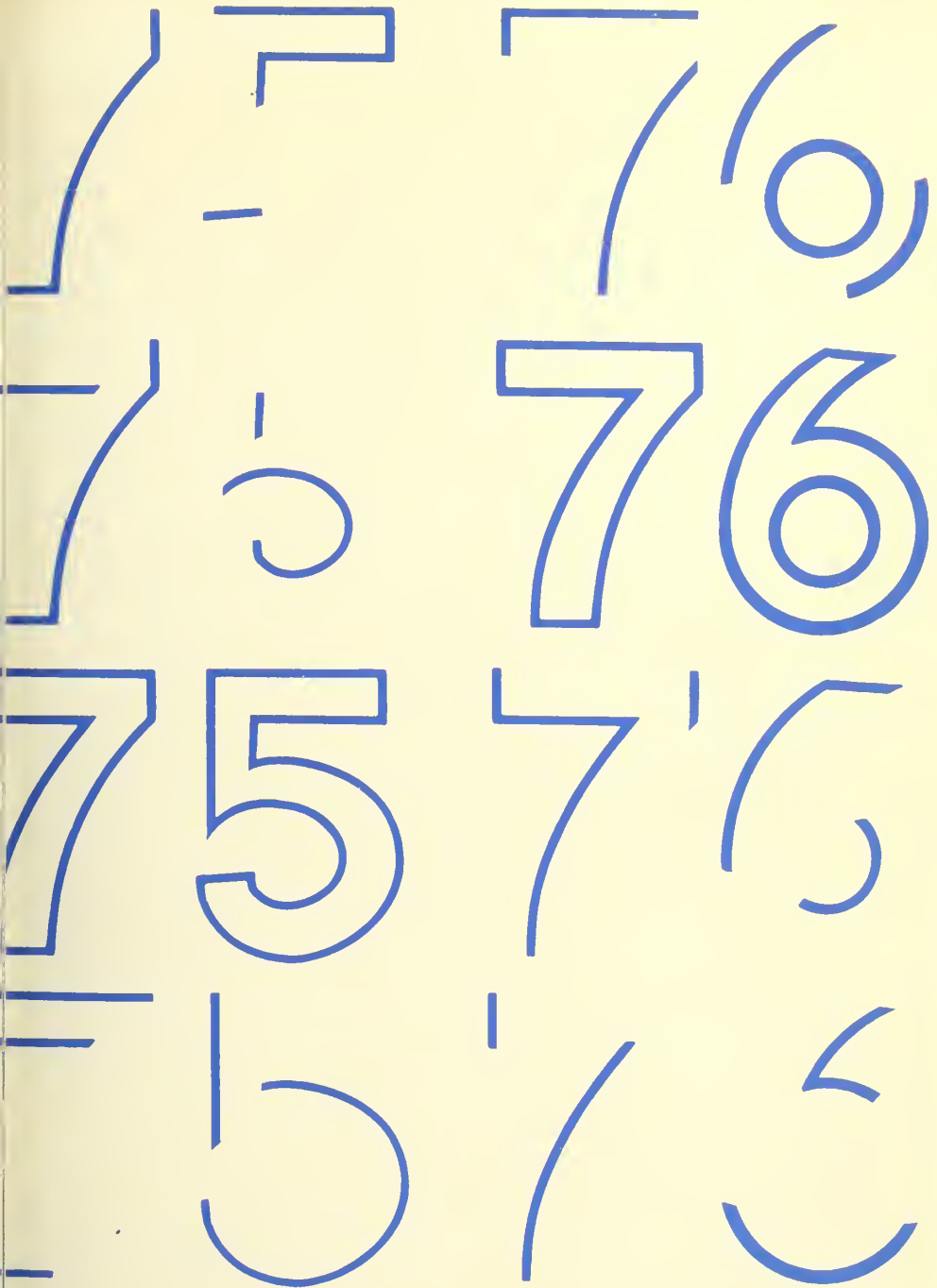
Priority will be given to those candidates who complete the application procedure by February 1, and they may expect a decision from the Admissions Committee by March 10. The possibility of admission is somewhat lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of $100 is required to reserve a place at the time admission is offered to an applicant.

Andover, Massachusetts



Phillips Academy
Andover, Mass. 01810
617-475-3400

BMC



Course of Study

1975-1976

Phillips Academy
Andover, Massachusetts

Course of Study

Course of Study

The curriculum of Phillips Academy combines a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level courses or other elective opportunities. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their attainment. Accelerated sequences and advanced courses offer particularly able and well prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class, if their deficiencies for full membership in it do not exceed a certain number of trimester courses, depending on the grade entered.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic requirements as well as with the possibilities of its flexible academic program. Members of the Upper Middle and Senior classes should take care to familiarize themselves with the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

In order to make the program as flexible as possible, the academic year is divided into three equal trimesters. The purpose is to provide greater variety within the curriculum at all levels and opportunity for the substitution of independent work or off-campus projects for regular courses during the term. All departments offer year-long courses as well as term-contained courses, which are completed in one trimester. The diploma requirements are therefore stated in terms of full-year courses or trimester units.

Special Courses in Foreign Languages

Special courses covering the work of two years in one are open to qualified students in all classes in Latin and to Seniors in French, German, Greek, Italian, Russian, and Spanish. These *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a *10-20* course as a diploma requirement.

Accelerated Sequences and Advanced Placement

The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three or five years' work in four; and a two-year honors sequence in the physical sciences. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Andover students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Independent Projects for Seniors

With the approval of a faculty committee, a Senior may undertake independent work under the supervision of a member of the faculty in place of some portion of the course work normally required. Opportunities, which vary according to the extent to which a student has fulfilled diploma requirements, range from a project in place of a course in any or all terms to the substitution during either the winter or spring terms of an extensive project carried on during a term away from school or while a student remains at school to carry one or more necessary courses.

Off-Campus Programs and Projects

Off-Campus Programs are becoming increasingly important as schools recognize that many students wish to gain a practical understanding of the problems of contemporary life and to contribute as much as they are able to their solutions. Andover believes that well-conceived programs can demonstrate the need for knowledge and skills and stimulate the desire to learn. Where possible, it attempts to relate practical experience to the concerns of the classroom.

The *Community Service Program* carried on in the nearby cities and towns of Lowell-Greater Lawrence area, has in recent years involved well over one hundred students from Phillips Academy in voluntary, free-time work in hospitals, schools, and youth guidance and recreation centers. See *Religion 36.*

The school also offers several off-campus residential programs.

The *Washington Intern Program* in which Andover joins with Exeter, allows a group of Upper Middlers to spend the Spring Term living together in Washington and working in the offices of U.S. Senators and Congressmen. Drawing upon several years' experience with a summer residential work-study program in Boston's South End, the school now sends students of the *Man and Society* course to winter term work-study programs in Boston and Mexico. See *Social Science 401* and *402.*

In addition to school-sponsored group programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. The school is prepared to make provision for students who can work out apprenticeships in

schools, studios, laboratories, or research organizations in their home community or within reach of Andover. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements yet free a block of time during the appropriate term.

School Year Abroad

Students may elect to spend their Upper Middle or Senior year studying in France, Spain, or Germany in the *School Year Abroad* program, jointly sponsored by Andover, Exeter, and St. Paul's. Students live with host families while pursuing a course of study under the supervision of teachers from the sponsoring schools. The program provides full academic credit as well as the experience of immersion in a foreign culture. In some cases, students may spend one or two trimesters in the program rather than the full year. Students wishing to participate in *School Year Abroad* should consult their Academic Advisor and the *School Year Abroad* Coordinator for guidance in the selection of courses both preceding and subsequent to their year abroad.

Planning a Program of Studies at Andover

The following is designed to help parents of Andover students to understand both the theory and the practice of the Andover curriculum, and in particular to show the major decisions, and their consequences, which face the students and their Academic Advisors at each stage of the four-year program.

Main Features of the Curriculum

The curriculum of Phillips Academy combines a *required core* of studies that the school believes essential to a liberal education and *elective courses* designed to fit the special needs and interests of the individual student. Its aim is to provide both breadth and depth of experience at the secondary level.

Breadth

Breadth is secured by two somewhat different sets of disciplines. First are requirements leading to sound grounding in English, foreign language, and mathematics. Second are compulsory courses in such main areas of knowledge and experience as history, literature, laboratory science, and the arts.

Depth

Depth in particular fields is gained by choices of sequences which permit, in addition to English, four consecutive years of history or science or mathematics, or advanced study of foreign language, or religion and ethical thought, or the arts.

Flexibility

These possible sequences point to a third main feature of the curriculum –a flexibility sufficient for significant adaptation of the program to the individual student. It is chiefly this flexibility which necessitates careful study of the areas of choice at each stage.

Workload

All new students are advised to carry only a normal program. That is, in the Junior, Lower, and Upper Middle years, the normal program consists of five courses or the equivalent each term. The requirement for the Senior year is four major courses or the equivalent of the fourth major—that is, independent work equivalent to a major.

Academic Advising

Each student has an Academic Advisor who guides his program of studies throughout his Andover career. Within the diploma requirements, programs are determined by the student's long-range needs insofar as they can be foreseen. These needs include college and career plans, when known, scholastic aptitudes and weaknesses as revealed by previous records and aptitude tests, and character and personality development. Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents wish to offer.

Diploma Requirements

The basic diploma requirements are the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover, and the student's being in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted. This program includes nine trimester units of a foreign language, eight of mathematics, a full-year course in United States History plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of studio art, one trimester of music, and six trimesters of English including a two-trimester course of competence in writing and reading and a four-trimester sequence of general literature. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must take a trimester course in physical education in addition to required athletics. Entering Upper Middlers need take only one trimester of either studio art or music at the academy. Entering Seniors need not take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a *10-20* course in a foreign language. A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, *the future consequences* of each course choice should be noted, for certain choices in one year open the way to later options and may close the door to others.

Junior Year

Each trimester a Junior must take five courses, one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many Juniors elect *Perception and Expression (English 10)* as one of

their courses. In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math—begin sequence (usually *11, 12, 13)* or placement by the department;
2. Language—begin sequence (usually a year-long course at the *10*-level) or placement by the department;
3. Elective—Art, English, Social Science, History, another Math,
4. Elective—another language, Music, Performing Arts, Physical
5. Elective—Education, Psychology, Science.

Lower Middle Year

Each trimester a Lower Middler must take five courses, one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during their Lower Middle Year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

NEW STUDENTS

1. Math—enter the sequence by placement of the department (usually *20);*
2. Language—enter the sequence by placement of the department;
3. English—begin Competence (usually *Comp. (T2), Lit A);*
4. Elective—Art, Classics, Social Science, History, another Math,
5. Elective— another Language, Music, Performing Arts, Philosophy and Religion, Physical Education, Psychology, Science.

RETURNING STUDENTS

1. Math—continue the sequence (usually *24, 25, 26);*
2. Language—continue the sequence;
3. English—begin Competence (usually *Comp. (T2), Lit A);*
4. Elective—Art, Classics, Social Science, History, another Math,
5. Elective—another Language, Music, Performing Arts, Philosophy and Religion, Psychology, Science.

N. B.

Students wishing to take *Social Science 401 (Man and Society: Urban Studies), Social Studies 402 (Man and Society: Revolutionary Mexico),* or to participate in the *Washington Internship Program* should make sure that they will have no year-long courses during their Upper Year. Students wishing to participate in the *School Year Abroad Program* during their Upper Middle Year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year.

Upper Middle Year

During the Upper Middle year and the Senior year, a student must accumulate 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall, all take the CEEB Scholastic Aptitude Tests in the Winter, and many take the CEEB Achievement Tests in the Spring of their Upper Middle Year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Most students satisfy their United States History requirement during their Upper Middle Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

NEW STUDENTS

1. Math—enter the sequence by placement of the department (usually *30* or *31);*
2. Language—enter the sequence by placement of the department;
3. English—begin Competence (usually *Comp. (T2), Lit A);*
4. Elective—Archaeology, Art, Classics, another English, Social
5. Elective—Science, History, another Math, another Language, Music, Performing Arts, Philosophy and Religion, Psychology, Science, Science Honors.

RETURNING STUDENTS

1. Math-continue the sequence (usually *37, 38);*
2. Language—continue the sequence;
3. English—continue the sequence (usually *Lit B (T2), Lit C);*
4. Elective—Archaeology, Art, Classics, other English, Social
5. Elective—Science, History, another Math, another Language, Music, Performing Arts, Philosophy and Religion, Psychology, Science, Science Honors.

N. B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year must have no year-long courses during their Senior Year.

Senior Year

During the Upper Middle year and the Senior year, a student must accumulate 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses. Many Seniors re-take the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

NEW STUDENTS

1. Math—enter the sequence by placement of the department, if the requirement is not yet satisfied (usually *40);*
2. Language—enter the sequence by placement of the department if the requirement is not yet satisfied;
3. English—begin Competence *(Comp. (T2), Lit A);*
4. Elective—Archaeology, Art, Classics, another English, Social
5. Elective—Science, History, another Math, another Language, a *10-20* Language, Music, Performing Arts, Philosophy and Religion, Psychology, Science, Science Honors.

RETURNING STUDENTS

Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Key to Course Designation

Courses listed as "0" are year-long courses, for example *French 31-0.* Courses listed as "123" are term-contained but sequential and may be taken separately or in sequence, for example *Art 21-123.* Courses listed as "1," "2," or "3" are term-contained and may be taken only once, for example *Art 10-1, Art 10-2, Art 10-3* indicates that the course is repeated. The designations of 1, 2, and 3 represent the trimesters in which the course is offered: 1 is Fall, 2 is Winter, and 3 is Spring. Some courses require a two-term commitment and are listed as T2, for example *Theatre 22-12 (T2)* is a two-term course offered in the Fall and Winter as a sequence with both terms required. Check carefully each listing for any other limitations such as prerequisites, permission of the instructor, etc.

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25–1 Archaeology
Four prepared classes. Open to Upper Middlers and Seniors. Limit 20 students. The course explores the methods archaeologists use to reconstruct prehistoric societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Emphasis is placed on two areas of the world where several of these changes are well documented: Mesopotamia and Mesoamerica. Lecture and class discussion are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The courses in Art are planned to develop the visual perceptions of all students. The basic course, *Visual Studies,* covers a broad range of material, is open to all, and is a prerequisite to almost all electives in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the chairman of the department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography. Students will be asked to contribute to the cost of art materials.

Introductory Studio Courses

10–1 Visual Studies
10–2 Five class periods and three hours preparation. In its emphasis on observation,
10–3 interpretation, and organization, the basic course is designed to supply an understanding of contemporary surroundings. Along with discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11–123 Introductory Ceramics
Pass/Fail. Four unprepared classes per week. Limit of ten students. Basic techniques of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as the functional possibilities of clay. At least one raku firing each term, or a similar special project.

12–1 Introductory Photography
12–2 Prerequisite: *Visual Studies (Art 10).* The course covers fundamentals of black
12–3 and white photography. Technique and control are emphasized for clarity, but content is the first consideration along with the development of a personal direction in the medium. This course is a prerequisite for all other still photography courses. Students are expected to provide their own cameras.

13–1 Art Studio
13–2 Pass/Fail. A studio open to all classes which strives for flexibility to suit the
13–3 varied art interests of the students. There is either an introduction for some people to drawing, painting, and printing, or an opportunity for those more experienced to develop the abilities and ideas they already have achieved. There is a balance between structured classes and free creative periods. *Visual Studies (Art 10)* is preferred but not required. Limit of 12.

Intermediate Studio Courses

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies (Art 10)* is a prerequisite for all intermediate courses.

20–123 **Drawing**
Prerequisite: *Visual Studies (Art 10).* A course designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media.

21–123 **Animation**
Prerequisite: *Visual Studies (Art 10).* An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. Given in collaboration with the Music Department, the course may interest either the art student who wishes to explore the visual possibilities of the medium or the music student who wishes to find a vehicle for an original composition.

22–123 **Television Videotape**
Prerequisite: *Visual Studies (Art 10).* A term-contained sequence in the use of videotape, both for group productions and for individual projects. Students may choose to work on video-plays, documentary, or abstract imagery. All work is done on black and white ½-inch videotape.

23–123 **Two-Dimensional Design**
Prerequisite: *Visual Studies (Art 10).* The course deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color–free studies and collages dealing with the structural and expressive nature of color; 2) drawing–exercises using pencil, pen, and brush, figure and landscape drawing: and 3) figure ground–expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design.

24–123 **Three-Dimensional Design**
Prerequisite: *Visual Studies (Art 10).* Woodworking, welding, furniture design, toy-making, sculpture–all these activities share principles of design which can be more broadly applied to architecture, city and regional planning. The course introduces the wood and metal shops via a series of assigned projects, each of which demonstrates a basic set of design principles.

25–123 **Intermediate Ceramics**
Prerequisite: *Visual Studies (Art 10). Introductory Ceramics (Art 11)* preferred but not required. The course stresses combining techniques and the development of basic skills toward new forms. Participation in glaze preparation and firings.

26–123 **Intermediate Photography**
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Four unprepared hours per week, offering students the chance to pursue a project of their own choice. The course should be taken with an instructor different from the one the student studied with in *Introductory Photography (Art 12).*

Advanced Studio Courses

Visual Studies (Art 10) is a prerequisite for all advanced courses.

300–123 **Graphics and Photography**
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Applying photography to graphic arts, particularly through photo-silkscreen. Individual experimentation is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques.

301–123 **Studio Photography**
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Limited to ten students. Portraiture and Fashion: controlled lighting with photo flood and studio strobes. Large format cameras (2¼ and 4 x 5) are supplied for this course. Meets Wednesdays from 1:30 to 5:30 for shootings; subjects may be professional models from Boston or subjects of the student's choice.

302-123 **Painting**
Prerequisite: *Visual Studies (Art 10).* An introduction to the basic concepts and techniques of painting in oil, acrylics, and watercolors. In preparation for the serious work of each student in that individual's selected field of interest, there are class discussions, demonstrations, and appropriately assigned problems in design. It is suggested that one or two of the intermediate courses–*Problems in Art History (Art History 27), Two Dimensional Design (Art 23),* or *Drawing (Art 20)*–are helpful prior to painting.

303–123 **Filmmaking**
Prerequisite: *Visual Studies (Art 10).* Students are encouraged to develop their own projects. Some students may choose to continue with work begun in *Animation (Art 21)* or *Television (Art 22)* (which are *not,* however, prerequisites for *Filmmaking).* Others may choose to do documentary or narrative projects, or 'abstract' movies. Cameras, editing equipment, etc., are provided.

304–123 **Advanced Ceramics**
Prerequisite: *Visual Studies (Art 10).* For those who are seriously interested in the total operation from design to execution. Hand-building, wheel-throwing, glaze-making (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips.

305–123 **Print Shop**
Prerequisite: *Visual Studies (Art 10).* Relief Painting: designing, cutting, and printing linoleum and woodblocks in editions. Silkscreen: making stencils for the screen, experimenting with color, and printing imaginative compositions as well as message-oriented posters. Intaglio: starting with drypoint and learning the processes of etching and printing in a workshop atmosphere.

306–0 **Advanced Photography**
306–12 Prerequisite: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).*
306–13 Students must enroll for the Fall Term and at least one other term. Full-year participation is encouraged. The course is designed to provide an opportunity to work intensively in photography for an entire year; it includes work on technique, photographic seeing, photographic history, and individual projects.

307–0 **Documentary Photography (T2)** (a two-term commitment)
307–12 Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).*
307–13 Students must enroll for the Fall Term and at least one other term. Full-year participation is encouraged. While some advanced darkroom instruction is offered, the emphasis of this course is the "documentary style," i.e., photographing people and their environments. Methods for producing essays and picture stories are explored. The works of many photographers are viewed and discussed. Individual projects are encouraged, and assignments are given on request.

308–123 **Sculpture**
Prerequisite: *Visual Studies (Art 10).* Offers an opportunity to work in practically every material available to the sculptor today, including wood, stone, metal, plastics, plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes include the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Addison Gallery, a standing steel figure by Jamie Morgan, '73, which was on display in the Headmaster's Office and others. Individual criticism is stressed.

309-123 **Kinetics**
Prerequisite: *Visual Studies (Art 10). Three-Dimensional Design (Art 24)* is recommended. A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course.

310–123 **Architecture**
Prerequisite: *Visual Studies (Art 10).* For Uppers and Seniors. A design course based on previous work on *Visual Studies (Art 10)* and/or *Three-Dimensional Design (Art 24)* which relates the basic elements of surface and volume to the design of shelter, the efficient combination of human functions, and the organization of construction. At least one term involves large-scale projects constructed in the woodworking shop. Examples from recent years include the Search and Rescue climbing tower near Rabbit Pond and the playground at a local elementary school.

311–123 **Contemporary Communications**
Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, nonfiction, poetry, drama, motion pictures, and the visual arts. Prerequisites: Successful completion of a course in art, music, or theatre. At least one term the course engages in a large group project aimed at public presentation. (Mr. Owen and Mr. Lloyd).

Art History

Art History 27–1, 27–2, 27–3 Prerequisite: *Visual Studies (Art 10).* This course is about the ideas that underlie the making of art, and about the art itself. One goal of the course is to provide the student with a working vocabulary in order to approach the visual arts; the other goal is to acquaint the student with the major stylistic movements in Western Art, from Classical to Modern times. For example, the class may take a painting or building from the Renaissance and analyze how its style reflects the social, political, aesthetic, and spiritual ideas of Renaissance Italy, and also analyze it in strictly formal terms of line, tone, and color. This course is recommended as a precursor to *History 55, History 56,* and *Art History 57.* Occasional trips to Boston museums are taken.

For a course in American Art and Music, see Music 29.

History 55–1 **Art and Architecture Before the French Revolution**
Four prepared class periods. For Uppers and Seniors. Prerequisite: *Visual Studies (Art 10)* or permission of the instructor. This course is an introduction to the Western visual arts from the archaic sculpture of Greece to the late Baroque of the eighteenth century. Looking at major art historical epochs and problems, the course focuses on the Renaissance and Baroque. It also includes occasional visits to the Museum of Fine Arts and the Gardner Museum in Boston.
~~(Not offered in 1975-76).~~

History ~~56–1~~ 56–2 **Art and Architecture Since the French Revolution**
Four prepared class periods. For Uppers and Seniors. Prerequisite: *Visual Studies (Art 10)* or permission of the instructor. This course discusses major movements in the visual arts since the late Baroque through examination and comparison of representative works. The course, after introducing the mechanics of formal analysis, considers the changes in the French, English, and American arts during the late eighteenth and early nineteenth centuries, the problem of academic intolerance, and the rise of Impressionism. Looking at the development of more contemporary schools, it examines the relationship between photography and earlier media, the experiments of Cubism and Expressionism, modern architecture, Surrealism, and the New York School. The course includes occasional trips to the Boston Museum of Fine Arts. ~~(Not offered in 1975-76).~~

Art History 57–3 **American Art Reveals American Life**
Prerequisite: *Visual Studies (Art 10).* Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course takes the opportunity of the Bicentennial to look closely at the primary source material in the collection

of the Addison Gallery of American Art. Providing the chance to study original works of art, the course uses the paintings, sculpture, graphics, and ship models in the Addison's collection as a basis for a survey of the arts in America. In addition to assigned reading each student works on an independent project object in the museum's collection.

History 55, History 56, and Art History 57 when taken consecutively combine to form a full year's preparation for the Advanced Placement Examination in Art History.

ıe Classics

The foreign language diploma requirement is competence at the level of the third year of a modern or ancient language. Such competence in Latin or Greek is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh trimester, by passing a special examination set by the department.

The Department of Classics offers students through the study of the Greek and Latin languages a direct entry into Greek literature, which is still unsurpassed in quality, and into Latin, which as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the clue to its meaning.

Latin has traditionally been the first language of the two to be studied in school. Greek, as a first language, however, is no more difficult than Latin. The Greek alphabet is easily mastered in the first two class meetings and students quickly discover that the language has poetic and expressive quality and content which stimulate imagination and understanding of man's political and intellectual development.

Greek Courses

10—0 Greek
Five prepared class periods. The course prepares students for the reading of Greek literature. The necessary training is given in basic vocabulary, forms, and syntax. Frequent practice together in class with other students and the teacher in sight reading of characteristic passages of Greek literature provides an introduction into the bases of Greek civilization and culture. Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Crosby and Schaeffer's *Introduction to Greek* (Allyn and Bacon) are used.

10-20—0 Greek
Five prepared class periods. The course is open to Seniors and Upper Middlers. It covers in one year the essential material of *Greek 10* and *Greek 20.* The texts are Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Xenophon's *Anabasis,* ed. Mather and Hewitt (University of Oklahoma Press).

13—1 Introduction to Greek
13—3 Four prepared class periods. The course is for students whose curiosity for the Greek language and civilization has been aroused by their studies in Latin or the modern languages (including English). It provides an excellent introduction into the intricacies and subtleties of a highly inflected language. The student is treated to an inside preview of a body of literature which has been the groundwork for the Western World's literature of today. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20–0 Greek
Five prepared class periods. The second year is occupied with selections from Xenophon's works and with some of the philosophy of Plato. Prose composition in Attic Greek is studied, the grammar is reviewed, and there is work in sight translation. The texts are Xenophon's *Anabasis,* ed. Mather and Hewitt (University of Oklahoma Press) and selections from Plato's dialogues in *The Martyrdom of Socrates,* ed. Doherty (Oxford).

30–0 Greek
Four prepared class periods. Selected books of the *Iliad* and the *Odyssey* and a play of Euripides examine the nature of tragedy, heroism, and self-discovery. The texts are Benner's *Selections from Homer's Iliad* (Naiburg), Homer's *Odyssey I-XII,* ed. Standford (St. Martin's Press), and Euripide's *Hecuba,* ed. Hadley (Cambridge).

40–123 Greek
Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets. The texts are Chase and Phillips' *A New Greek Reader* (Harvard University Press), Euripides' *Medea,* ed. Elliott (Oxford), Sophocles' *Oedipus Tyrannus,* ed. Jebb (Cambridge), and Campbell's *Greek Lyric Poetry* (St. Martin's Press).

Latin Courses

10–0 Latin
Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms, and syntax of the language along with frequent practice in sight reading. The student is introduced to the general outline of Roman history and civilization and improves his English vocabulary through the study of Latin derivatives. The text is Chase's *A New Introduction to Latin,* (Independent School Press).

10-20–0 Latin
Five prepared class periods. Students who are not ready for *Latin 20* may be placed in *Latin 10-20* and thus given opportunity to complete two years of work in one. Those who pass the course successfully are given credit for two years of Latin. The course is reserved for students who give evidence of high ability. Texts are the same as those for *Latin 10* and *Latin 20.*

11–0 Latin
Five prepared class periods. The course begins after the middle of the Fall Term. Its content is the same as *Latin 10,* taught at a more gradual pace to allow time to resolve specific linguistic problems. Students who find unusual difficulty in mastering a modern foreign language are encouraged to discuss their eligibility for the course with their teacher, advisor, or with the Chairman of the Department of Classics. The text is Buehner and Ambrose's *Preparatory Latin,* (Independent School Press).

13–1 Introduction to Latin
13–2 Four prepared class periods. The course is for students seeking an introduction to the Latin language, or those whose studies in other languages (including English) have aroused their curiosity about grammar, syntax, and vocabulary. It offers special profit and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so.

20–0 Latin
Five prepared class periods. During the first term, the course gives a thorough review of the fundamentals of Latin grammar and begins the reading of Caesar. Caesar's account of his campaigns provides for the student insight into the problems of political ambition and international intrigue. These ideas are developed and compared in additional readings from Nepos and Livy. There is practice in sight translation and prose composition. The texts are Buehner's *An Intermediate Latin Reader* (Independent School Press) and Colby's *Review Latin Grammar* (Independent School Press).

21–0 Latin
Five prepared class periods. The course continues the work begun in *Latin 11.*

30–123 Latin
Four prepared class periods. Each term is the prerequisite for the term which follows it. Through the writings of Cicero and a variety of other authors, the course teaches students to read Latin prose with increasing ease. It presents a picture of Cicero's life and times and compares the political unrest and maneuvering of his time with that of our own. The literary importance of Cicero as the creator of a prose style which influenced the literature of Europe for centuries is assessed. In the Spring Term the student is introduced to Roman poetry through readings in Vergil's *Aeneid.* The student will begin to understand how Vergil, as heir to the Homeric tradition, gave to epic and to Western poetry in the generations that followed him its definitive form. The text is Gillingham and Barrett's *Latin: Our Living Heritage, Book III* (Charles E. Merrill Books).

31–0 Latin
Five prepared class periods. The course follows the same outline as *Latin 30.* It is open to students who have completed *Latin 21* and to students in their first year at Phillips Academy.

40–123 Latin
Four prepared class periods. Each term is the prerequisite for the term which follows it. By a study of selections from the *Aeneid* and other Latin poetry, the course introduces students to both the forms and content of classical poetry. Students become familiar with the symbolic character of the Western poetic tradition in Vergil, its source. This use of symbolism reflects the poet's unsurpassed treatment of the human condition and destiny. The text is *The Aeneid of Vergil,* ed. Knapp (Scott, Foresman and Company).

50–123 Latin
Four prepared class periods, one unprepared period devoted to sight work. The course includes preparation for the Latin Advanced Placement Examination. In the Fall Term, selections from Livy's *Histories* give students insight into the foundations of some of the Western World's ideas of government and law. The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a Twentieth Century psychiatrist as "a type of the perfectly integrated personality." Selections from Tacitus' *Annals* are read as a contrast because of their studied depiction of human excess in tyranny and degradation.

Classic Courses

11–3 Etymology
Four prepared class periods. For Juniors. A practical method of strengthening conversational literary, and scientific vocabulary by the study of stems, prefixes, and suffixes in English words, especially as derived from Greek and Latin, increasing accuracy of definition and perception of nuances of meaning.

21–1 Classical Civilization: Greece
21–3 Four prepared class periods. The course is designed for underclassmen. It focuses

on the height of ancient Greek civilization, the foundations of its culture, and its unique experience in political democracy. In dealing with this pinnacle of civilization, the course provides insight into the realities of political democracy today by suggesting how our society has arrived at the point it is at now and hinting at where we may be headed. The texts are Starr's *The Ancient Greeks* (Oxford), Kitto's *The Greeks* (Penguin), and *The Portable Greek Reader,* ed. Auden *(Viking).*

22–1 **Classical Civilization: Rome**

22–2 Four prepared class periods. The course is designed for underclassmen. It introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The development of the concepts of politics, law, and empire as we know them today are discussed. The course challenges the student to consider the meaning of the Roman experience in the results of the "Roman Peace" as well as in its "Decline and Fall." The texts are Starr's *The Ancient Romans* (Oxford), Barrow's *The Romans* (Penguin), and *The Portable Roman Reader,* ed. Davenport (Viking).

30–123 Epic Poetry

Four prepared class periods. Each term is a prerequisite for the following term. This course focuses on western epic poetry: the poems are delightful, unique literary monuments of great importance in the development of western literature; and, they are a fascinating means of learning about Indo-European culture, human psychology, and man's creative history. Fall Term deals primarily with cultural development and psychology, with a variety of readings, especially from Frazer's *Golden Bough.* Winter and Spring Terms are devoted to the epics themselves as literature and as evidence of the Fall Term's material. *Gilgamesh,* the *Iliad* and *Odyssey,* the *Song of Roland, Beowulf* and Tolkien's *Lord of the Rings* are read, as well as excerpts from other European epics.

31–1 Etymology

31–2 Four prepared class periods. For Lower Middlers, Upper Middlers, and Seniors. Training in the interpretation of English words by systematic analysis of elements derived from Greek, Latin, and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding.

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course),* and to complete the *Literature Sequence* through *Literature C.* For those entering Seniors who must take the *Competence Course,* the requirement is reduced by the appropriate number of trimesters.

The English Department also offers courses at the following levels: *Perception and Expression (English 10)* for Juniors; *English as a Second Language (English 13)* for some foreign students; specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

Juniors

Students entering the Junior Class are strongly urged to take the normal Junior course *Perception and Expression (English 10)* although they may elect to take no English at all.

Lower Middlers and Upper Middlers
Entering Lower Middlers and Upper Middlers should take the *Competence Course.* They will be advanced to the *Literature Sequence* as soon as they establish competence.

Seniors
Entering Seniors take the *Competence Course* in the Fall Term. If an entering Senior is deemed competent early in the Fall Term, he may apply to the Department Chairman for permission to waive the literature requirement and enroll in one of the specialized courses.

Junior Year Courses

10–123 **Perception and Expression** (not to be confused with *Perception and Expression/Studio–English 11)*
This course, recommended for Juniors, does not seek to prepare students for *Competence.* Rather, it involves students in a number of experiences intended to increase their awareness of the world around them and of language, including the reading of fiction, drama, and poetry; recording impressions in a journal; listening to programmatic music; reading aloud and elementary acting; and the writing of original material.

11–123 **Perception and Expression/Studio**
This course, recommended for Juniors, has four prepared periods and one unprepared period. Taught jointly by members of the English and Art Departments, the course, like *Perception and Expression (English 10)* also seeks to involve the student in a number of experiences intended to increase awareness of the world around us. In addition to reading, writing, and listening, students work with tape recorder and video tape, still and motion camera, and acting, involving individual and group performances in various media. This course exempts students from the photography half of *Visual Studies (Art 10).*

13–123 **English as a Second Language**
The course acquaints the foreign student with the idiom and structure of English. This class is also open to upperclassmen.

16–23 **Language Skills (T2)** (a two-term commitment)
This course is designed for those students, primarily Juniors, who need supplementary help in overcoming weaknesses in reading, writing, spelling, and vocabulary. By studying the structure of words and sentences, and by practicing patterns of pronunciation, students can learn to understand language better and use it more effectively. Specific assignments are geared to the needs of each student. Open only to students who have permission of the Chairman of the English Department.

Juniors are also eligible to enroll in Etymology, which is described under Classics 11.

Required Sequence Courses (2 years)

	Fall	Winter	Spring
First year of sequence	Competence (T2)		Lit A
Second year		Lit B (T2)	Lit C

Competence Course (T2) (a two-term commitment)
The course is designed to teach the basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature and the specialized courses. The course is concerned with the recogni-

tion and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. It encourages the acquisition of important reading skills in conjunction with the study of writing. Passages that have been composed by skillful writers are evaluated for their particular strengths: organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas.

Literature Sequence

The texts listed comprise about half the reading in each course, the remaining texts to be chosen by the individual instructor of each section.

Lit A

A one-term introductory course to the *B* and *C* courses in which the student reads in depth poems and short stories of the Twentieth Century. Composition stresses the analysis of these poems and stories.

Core Texts: *Pocket Book of Modern Verse,* ed. Oscar Williams
50 Great Short Stories, ed. Crane (Bantam)

Lit B (T2)

A choice among three courses in English and American literature 1660-1900. Each course is a two-term unit given in the Fall and Winter Trimesters.

Lit B-1 (T2) (a two-term commitment)
The prose and poetry of the late Seventeenth and Eighteenth Centuries, with emphasis on satire.

Core Texts: *Fall Term*
Swift, *Gulliver's Travels*
Pope, selected poems

Winter Term
Fielding, *Joseph Andrews*
Blake, selected poems; or selections from *Eighteenth Century Minor Poets*

Lit B-2 (T2) (a two-term commitment)
Romantic literature in England and the United States.

Core Texts: *Fall Term*
Keats
Bronte, *Wuthering Heights*

Winter Term
Whitman
Melville, *Moby Dick;* or Hawthorne's short stories

Lit B-3 (T2) (a two-term commitment)
English and American literature of the later Nineteenth Century

Core Texts: *Fall Term*
Hardy, *Mayor of Casterbridge;* or Dickens, *Hard Times*
Browning

Winter Term
Twain, *Huckleberry Finn* or *Pudd'nhead Wilson*
Dickinson, *Final Harvest*

Lit C

A choice among three courses centering on three plays of Shakespeare and some related works. Each course is one trimester given in the Spring Term. Each section focuses on a theme chosen by the individual instructor.

Lit C-1: *Macbeth*
Lit C-2: *Hamlet*
Lit C-3: *Othello*

Elective Courses

Only courses with sufficient enrollment will be given.

18–1 **Developmental Reading**
18–2 Primarily for Upper Middlers and Seniors. A course for increasing reading speed and comprehension, using the *Harvard Reading Course* with supporting exercises in writing.

25–12 **Introduction to Writing (T2)** (a two-term commitment)
An introductory course to the writing of original short stories, informal essays, and poetry. After examining examples of the genres mentioned, the student tries his hand at one or more of these forms. The second term, for which the first is a prerequisite, is devoted largely to reading works in progress. (Mr. Owen)

Other electives of special interest to students of English, such as Public Speaking, Shakespearean Workshop, and Playwriting, are listed under Theatre.

Specialized Courses

Specialized Courses are open to students who have successfully completed *Literature A, B,* and *C.* Courses numbered in the *500*'s are more intensive and demanding than those numbered in the *400*'s. Each course has four prepared class periods a week, unless specifically stated otherwise.

401–123 **Philosophy and Literature**
As a bridge between *Lit C* and the *500* courses, this course extracts philosophical statements contained in literature. Fall Term concentrates on the definition of truth; Winter Term, beauty; Spring Term, goodness. The readings contain statements from philosophers as well as poets and novelists. (Mrs. Bugbee)

402–1 **New England Poets**
A survey from Puritan times to the present, including Anne Bradstreet (who settled in Andover in 1644), Taylor, the Hartford Wits, Bryant, Whittier, Emerson, Thoreau, Longfellow, Holmes, Robinson, Frost, former P. A. teacher Dudley Fitts, and other 20th century poets the class chooses. In reading the poetry for its own sake, we also consider the lives and times of the poets and their relationships to that elusive abstraction, the New England Mind. Selected readings in American social and intellectual history and field trips to nearby homes, museums, and landscapes. (Mr. Edmonds)

403–2 **Forty Themes**
403–3 This one-term course invites students to write descriptive and narrative themes of about 350 words four times a week. For most themes, students choose their own subjects. Classroom work includes the reading and the critique of themes, and discussion of style. (Mr. Edmonds)

404–1 **Hemingway: The Man and his Work**
A consideration of Hemingway as a craftsman and a moralist is the primary concern of the course. Some attempt is made to define the relationship between the artist and his work: how a writer makes books, and how his books make him. Both short stories and novels are read. (Mr. Sykes)

405–3 **The Harlem Renaissance**
The poetry and prose of this intense period of Black cultural awareness is the focal point of the course. Both fiction and non-fiction are read as the artistic

expression and theory of the period are considered. Alain Locke's cultural manifesto *The New Negro* is the major text, which includes such authors as Toomer, Hughes, McKay, and Johnson. (Mr. Sykes)

420–123 A Sequence in Film Study

Although the following term-contained courses may be taken singly, they are most effective as a sequence.

Fall. THE WESTERN. Not a survey, but an investigation of some themes and styles in the Western. The emphasis of the course is on the films themselves, primarily those of Ford, Hawks, and Mann, with readings in the criticism of Sarris and Bazin. Students are encouraged to compare the growth and decline of the Western to that of the Elizabethan and Jacobean Revenge Drama, or to another similar genre.

Winter. THE DETECTIVE MOVIE. The films are largely those of Hawks, Lang, and Hitchcock. The critical emphasis is the same as that of the Fall Term, but students who are continuing in the course do so in the context of two broad questions: (1) How does a director have to modify his style in a new genre? (2) Is either the detective or the gangster an urban cowboy?

Spring. THE MOVIE WITHOUT VIOLENCE. What are the alternatives to violence in an "action medium"? A look into documentary, abstraction, musical comedy, etc. (Mr. Marx)

425–3 Utopian Literature

Since Plato, western men have constructed imaginary societies which present concepts of the world as it should be, not as it is. Beginning with Plato's *Republic,* the course surveys major utopian works which include *Gulliver's Travels, Looking Backward,* and *Brave New World.* As a final project, each student designs his own utopia. (Dr. Irish)

500–12 James Joyce (T2) (a two-term commitment)

A study of the developing technique and thought of Joyce in *Dubliners, A Portrait of the Artist as a Young Man,* and *Ulysses.* Ellman's *James Joyce* and *The Odyssey* are used as a background. Some of *Finnegan's Wake* is read aloud and puzzled over at the end of the course. Secondary sources are eschewed. (Mr. Brown)

501–12 Man and God

The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include *The Oedipus Cycle,* Sophocles; *Hamlet,* Shakespeare; *Rosencrantz and Guildenstern Are Dead,* Stoppard; *Desire Under the Elms, Mourning Becomes Electra,* O'Neill; *J. B.,* MacLeish; *A Portrait of the Artist as a Young Man,* Joyce; *The Fixer,* Malamud; *The Idiot,* Dostoevski; *The Trial,* Kafka; *Tiny Alice,* Albee. (Miss St. Pierre)

507–2 Voices from the Waste Land

Eliot, Hughes, and Toomer are studied as "voices from a cultural and emotional waste land." The intent of the course is at once to isolate the divergent sources of these "waste-land" visions and to identify the images and sources of redemption in the three poets' works. Eliot's *The Love Song of J. Alfred Prufrock* and *The Waste Land,* Hughes's *Lennox Avenue Mural* and *Not Without Laughter,* and Toomer's *Cane* form the core of the reading for the course. Students are encouraged to reach beyond the required reading for paper topics. (Mr. Sykes)

508–123 Modern Theater

A chronological study of the development of drama in Europe beginning with Pirandello (Fall), in America beginning with O'Neill (Winter), and an investigative reading of contemporary playwrights in Europe and America (Spring). Enrollment in the Fall or in the Winter Term is a prerequisite for enrollment in the Spring Term. (Mr. Kirkland)

509–123 Shakespeare: The Man, The Times, The Theater, The Plays

Each term a cycle of related plays is read, with biographical and historical material. During the course of the year, the class reads representative tragedies, histories, and comedies. (Mr. Marx)

511–123 **Writers in Depth**
By reading the major works of a significant writer as well as biographical and critical material, members of this seminar explore questions such as these: What themes recur in the writer's work? What style does the writer employ? How autobiographical are the writer's works? What judgments have the critics rendered? How valid are these criticisms? O'Neill, Yeats, Faulkner, Lawrence, and Fitzgerald are among those writers recently studied. (Mr. Price)

513–123 **Novel and Drama Seminar**
Most of the course is concerned with the major works of modern literature, principally the works of James, Faulkner, Grass, Barth, Nabokov, Borges, O'Neill, Eliot, Brecht, Kopit, Williams, Storey, and Pinter. Students have the opportunity to study the "world" of each writer and to compare it with that of the others. In order that they may have a basis of comparison with the writers of the past, they also study *The Brothers Karamazov* and *King Lear.* Class periods are devoted to seminar discussions, exercises in logic and argument, dramatic readings, drama games, and critiques of student analytical and creative work. (Mr. Wise)

514–123 **Creative Writing**
The course combines creative writing with the study of literature in depth. The reading consists of novels, collections of short stories, collections of poems, usually chosen from great works of the 19th and 20th centuries. After the Fall Term, reading is chosen by the students in collaboration with the teacher. Class periods are devoted to workshops in which student writings are discussed and to seminar discussions of literary works. Normally the first term is devoted to fiction, the second to drama, the third to poetry, though fiction is stressed more than drama and categories tend to overlap. An individual may, if there is sufficient cause, choose to do an individual project rather than work in an area he finds uncomfortable, but all students are required to try all three major forms. (Mr. Zucker)

517–123 **American Writers of the Twentieth Century**
A thematic and comparative study of the novel and drama in America from 1900 to the present. Representative authors are Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, and Agee. (Dr. Goodyear)

518–3 **Milton and Spenser**
Students read shorter works of these two masters in preparation for study, in the second half of the term, of either Spenser's *The Fairie Queen* or Milton's *Paradise Lost.* The class meets in tutorials when reading the epics. (Mr. Kalkstein)

527–2 **Chaucer and his Age**
The wit, poetry, and genius of the later Middle Ages and Renaissance, as seen in Chaucer and medieval drama. (Mr. Regan)

528–3 **The Metaphysical Poets, and After**
A study of the line of wit and paradox in such seventeenth century poets as John Donne, George Herbert, and Andrew Marvell; the nineteenth century re-emergence of the mataphysical strain in the poetry of Gerard Manley Hopkins; and its continuation into the twentieth century. Background readings are assigned in the Bible, Plato, and classical mythology. (Mr. Regan)

Courses related to English (like Contemporary Communications, Epic Poetry, and Literature in Translation) may be found under Interdisciplinary Courses.

story and the Social Sciences

The diploma requirement for history is successful completion of *United States History (History 35)* plus one trimester elective taken in the Upper or Senior Year.

The introductory courses in the social sciences deal with man in various environments–geographical, economic, social, and political. They aim

to offer Juniors and Lower Middlers opportunities to study and evaluate basic social science concepts. A course in biography centers on the contributions of outstanding men. The approach is topical; the method depends on the substance and the skills at hand.

The courses in history are offered to Upper Middlers and Seniors. They are based on the conviction that a knowledge of the past is essential if an individual is to function effectively as a citizen in a modern democracy. Again, the approach is topical; the traditional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review.

Multi-disciplinary courses in the social sciences are also available for Upper Middlers and Seniors who wish to study particular societies of the twentieth century and who wish to have a work-study off-campus learning experience.

The essential purpose of all courses is to give the students training in the understanding of domestic and international problems that will serve them well as citizens. It is also hoped that for some students the courses may kindle an interest in the study of human society, past and present, that can be a source of pleasure and profit all their lives.

Introductory Courses in the Social Sciences

Social Science 10, 12, 13, 14, 15, and 16

Normally one-term courses. Four prepared class periods. For Juniors and Lower Middlers. These courses deal with man's geographical, economic, social, and political environments. Course materials include a variety of readings, films, slides, graphic and pictoral displays and maps. Among these are notetaking, outlining, essay writing, map and graph making, slide-taping, socratic exchange, informal debate, and group discussion. These courses emphasize those basic skills that enable students to make logical definitions, accurate analyses and summaries, relevant generalizations, and valid conclusions from marshalled arguments.

10–1 Human Geography

10–2 It has been said that the proper study of mankind is man, but it is also true that to
10–3 understand properly the place of man on the earth it is necessary to know something of our surroundings. This course concerns itself with the principles of human geography or the interrelationship between man and his natural environment. The organization of the course is topical; after an initial examination of the basic physical characteristics of the planet we live on, certain issues are examined in greater detail. Among these are the use and misuse of natural resources, the population problem, the crisis of the cities. Various associated topics, such as exploration, cartography, and map reading are also considered. Other resources include a variety of books, periodicals, maps, films, and slide tapes. There are a number of individual and group projects during the term.

12–1 An Introduction to Government and Politics: A Study of State and Local Government

12–2 Man is a political being and the political environments closest to him, although
12–3 the ones he may be least aware of, are those of his own community and state. Many people know that there is some kind of local government but few know how the officials are chosen and what they do after they are chosen. Everyone knows they must pay many kinds of taxes but few know how tax money is spent

in the community. There is clearly some kind of relationship between the town and the state but the nature of the relationship may not be clear to very many. This course focuses on the governments closest to us, the ones that all of us have to deal with in some way at some time. (Mr. Gurry)

13–1 **The Development of the Modern Economy**
13–2 After a brief introduction to the development of the contemporary problems of
13–3 industrialization, sources of energy, and population, this basic course in economics examines the American economy since 1929. It looks closely at the relationship between government policies and business, poverty and distribution of income, and growth and the environment.

14–1 **Socialism in China**
14–2 Did Mao-TseTung's regime in China just "happen"? Students in this course start with a study of three ancient philosophies, then read literature and history to try to determine the experiences and values of ordinary Chinese men and women. They then look carefully at the Communist period to see what in it is new, and what builds upon Chinese tradition. (Ms. Sizer)

15–12 **The Emergence of Man (T2)** (a two-term commitment)
15–23 Using an anthropological approach, this course concerns itself with the development of the human species and of human society. After an introductory study of two contemporary hunting and gathering societies, the course focuses on the origins of humanness, tracing man's biological and cultural development during the Pleistocene Age. With the arrival of modern man, students then consider the emergence of complex societies, using evidence from Jarmo to explore the implications of the Neolithic Revolution, and from Sumer to study the advent of civilization. A wide variety of materials are used: readings (including materials published by the American Anthropological Association), films and filmstrips, fossil casts, and artifacts. In addition, considerable use is made of the resources of the Peabody Museum of Archaeology. (Mr. Richards)

16–1 **Major "Isms" and the Nation State**
16–2 The course is fundamentally a study of government as seen through four prevail-
16–3 ing "isms" of the contemporary world, namely: capitalism, socialism, fascism, and communism. The approach is largely descriptive, analytical, and comparative and is therefore concerned with the "isms" historical context, their basic principles and policies, their philosophical and psychological roots, their nature as ideological systems and de facto governments, their variant structures and objectives, their mutual antagonisms and incompatibility, and their place in the balance of international ideas. It is a course in which institutions, persons, principles, concepts, theories, and ideas abound; and although it is not a complete presentation of the subject, it is a serious and complex introduction. (Mr. Bunnell)

401–0 **Man and Society: Urban Studies**
For Upper Middlers and Seniors. Prerequisite: Permission of the instructor; Washington Interns are not eligible. A multi-disciplinary course in the social sciences that focuses on the post-World War Two American city. Fall Term. Four prepared class periods. During this term the class studies three topics: (1) the relationships among racial, religious and ethnic groups, (2) power, leadership and decision making, (3) poverty, its physical and cultural manifestations. For the Winter Term students live at the South End House in Boston and work in internships in public and private community and city-wide agencies. The work job is the key part of the Winter Term. In the winter the students develop, with the instructor's guidance, individual goals and criteria to measure the success in achievement of these goals. Readings, weekly discussion groups, and community involvement grow out of the job experience and life in the South End. Each student keeps a journal during the Boston part of the course. The Spring Term opens with a week's evaluation by each student of his winter's experience. Then each student does a tutorial project on a question which was formulated as a result of the Fall Term's classroom study or the Winter Term's job experience. (Mr. Lyons)

402—0 **Man and Society: Revolutionary Mexico**
Four prepared class periods. For Upper Middlers and Seniors. Prerequisite: Permission of the instructor; Washington Interns are not eligible. A multi-disciplinary course in the social sciences which focuses on Twentieth Century Mexico. In the Fall Term four topics are studied: (1) relationships of differing culture groups; (2) persistence of poverty; (3) violence and social change in a continuing revolution; (4) organization and articulation of power groups in the process of decision making. After a two-week intensive orientation on present-day Mexico, the students use the Winter Term in a work-study experience in Leon, Mexico, where they live with Mexican families and work under the direction of Mr. R. P. Merrill, a director of Instituto "IMLE." The Spring Term is devoted to tutorial studies of topics selected by students as a result of interests stimulated by the work of the Fall or Winter Term. Depending upon its nature, the successful completion of this study is regarded as a term's work in either the History and Social Science or the Spanish Department. (Mr. Frederick)

NOTE: *A new calendaring of Social Science 401 and 402 may be inaugurated in 1976: a Spring, Summer, Fall Term sequence.*

403—~~23~~ **Education and Inequality (T2)** (a two-term commitment)
Two classes and two seminar periods each week. Open to Upper Middlers and Seniors who have taken or are taking *History 35.* All enrollees must plan to take the Lawrence Fieldwork sports alternative during either the Winter or Spring Term of this course. (See note below.)
Public education has promised much. What can it really deliver? "The future of our cities will be largely what education makes it," wrote John Philbrick in 1885. And the U. S. Supreme Court said in 1954, "Today, education is perhaps the most important function of state and local governments. It is the very foundation of good citizenship." This course is a study of the tension between American education ideals and the realities of children's lives, both in school and out.

In the 1970's, much research suggests that our education system is failing to live up to its promise, especially for poor children. Yet a few teachers and a few schools do appear to greatly increase children's chance of "success." How do children learn? In what ways are they affected by their family and school environments, and by the culture of city or suburb? Beginning with a historical study of family life in an industrial city (Lawrence, Mass.), the course draws on students' field experiences as tutors in both Lawrence and Andover schools to answer these questions. We look at the cultural background of immigrant children, enter in our own way the current controversy over the origins and development of intelligence, evaluate some working models of radical reform—and try to improve on these according to the concepts of good education we have jointly developed within the course. Readings include Donald Cole's *Immigrant City;* David Landy, *Tropical Childhood, Cultural Transmission and Learning in a Puerto Rican Village;* Herrnstein, *IQ;* Freud, *Civilization and its Discontents;* and Dennison, *The Lives of Children.* (Ms. Lloyd) (~~Not offered 1975-76~~)

NOTE: The Lawrence Fieldwork sports alternative brings students to schools in Lawrence two afternoons a week for a total of six hours work as teacher aides or tutors. Students may work either with elementary age children in need of individual attention, or with black and Puerto Rican children at the junior high level. Final arrangements depend on the interests of students who sign up for the course, and on the needs of Lawrence school children.

HISTORY COURSES

20—1 **Leaders of the Western World: The American Scene**
20—2 Four prepared class periods. For Lower Middlers. As a comparative study of
20—3 American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, con-

SOCIAL SCIENCE
404-3

INTRODUCTION TO ECONOMICS

Four prepared class periods. For Upper Middlers and Seniors with permission of the instructor. A brief survey of economic theory and contemporary economic problems. The primary areas of inquiry and analysis are the nature of capitalism and the Marxian critique, market structure and the price system, the Keynesian framework of American capitalism, and the character and limitations of growth and material wealth. *(Mr. Sewall)*

temporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies of men and women from the days of John Winthrop and Anne Hutchinson to those of Martin Luther King. Representative paperbacks used are: Samuel Eliot Morison, *Christopher Columbus, Mariner;* Marquis James, *Andrew Jackson, The Border Captain;* and Thomas T. Lyons, *Black Leadership in American History.* (Mr. Frederick)

21–123 **Leaders and Issues of the Western World: The European Scene**
Four prepared class periods. Open to Lower Middlers. A full-year sequence but may be elected on a term basis. The course covers roughly the medieval to early modern period of European history and the personalities and ideas that influenced it. An attempt is made to recreate the climate of former ages by including not only historical facts but the ideas and movements which changed civilization through literature, art, and the interplay of political, religious, and social forces. Course material includes biographies, plays, or studies in social history and some reading of original texts. Representative titles of paperbacks used are *Medieval People,* by Eileen Power, *Saint Joan* by G. B. Shaw, the *Agony and the Ecstasy* by I. Stone, R. Bainton's *Martin Luther,* Mattingly's *The Armada,* and *The Splendid Century* by W. H. Lewis. The Fall Term covers roughly the period up to the early Renaissance; Winter Term, Renaissance and Reformation; Spring Term, the religious wars, the development of national states, and the struggle between Absolutism and Constitutional Government. (Ms. Witten)

22–3 **Asian Biography**
Four prepared class periods. For Lower Middlers. This course carefully considers the lives of important Asian men and women with an emphasis on what they were like as individuals, what their contribution was, and how they were influenced by their times. Persons to be studied may include Confucius, the Empress Dowager Tz'u Hsi, Mao Tse-tung in China, Sakamoto Ryoma in Japan, and Gandhi in India. (Ms. Sizer)

35–0 **The United States**
Four prepared class periods. For Upper Middlers and Seniors, though normally taken in the Upper Middle year. This course, together with an additional term course to be elected from among the *40, 50* or *60* level history and social science courses, fulfills the diploma requirement in history. *History 35* is based on a series of paperbacks, original documents, and other readings that provide material for a survey of the history of the United States from the period before the Revolution to the present. Early topics stressed are the American Revolution, the establishment of the Federal Union, the age of Andrew Jackson, and the Civil War and Reconstruction. The emphasis then shifts to the industrialization of the United States, the problems that industrialization produced, and the attempts of the American people to deal with these problems. Finally, the course deals with the emergence of the United States as a world power, its part in two world wars, and the problems that it faces today. At the start of the course, emphasis is placed on such skills as close reading, note taking, and the writing of essay questions. Later on the student is introduced to different kinds of historical material, with more emphasis on discussion. In the Spring Term the writing of a research paper represents a major part of the work.

Representative titles are Edmund Morgan's *Birth of the Republic,* two volumes in Macmillan's *New Perspectives in American History* series, two volumes in the American History Series edited by Carl N. Degler and David M. Potter, two volumes in the Wiley American Republic Series, and William E. Leuchtenburg's *The Perils of Prosperity.*

Candidates for the *Washington Intern Program* are selected from students taking *History 35* as Upper Middlers.

1–123 **East Asia in Revolution**
Four prepared class periods. For Upper Middlers and Seniors. "Revolution" has become cheap currency, but there is really little else that can appropriately characterize the movement of Chinese and Japanese histories over the past century. The course is thought of as a year-long course, but it is offered in three term-

contained units as follows: Fall: THE TRADITIONAL EAST ASIAN SETTING; Winter: THE IMPACT OF THE WEST; Spring: THE EAST ASIAN RESPONSE.

To begin to understand the dynamics of contemporary East Asia, an attempt must first be made to comprehend the East Asian tradition. For this purpose, the Fall Term's work includes readings from E. O. Reischauer and J. Fairbank, *East Asia: The Great Tradition;* C. P. Fitzgerald, *A Concise History of East Asia;* H. G. Creel, *Chinese Thought from Confucius to Mao Tse-tung;* E. O. Reischauer, *Japan, The Story of a Nation;* J. Fairbank, *The United States and China;* and Allie M. Frazier (ed.), *Chinese and Japanese Religions.* The Winter and Spring Terms include readings from Teng and Fairbank, Michael and Taylor, Mary C. Wright, O. E. Clubb, H. Borton, R. K. Hall, A. D. Barnett, R. North, S. Schram, and E. Snow.

The course consists of readings (as noted above), lectures, audiovisual materials, map exercises, and work projects. In short, the overall effort is to introduce American students to Asia through study and critical examination of essentially the past century's histories of China and Japan. (Mr. Royce)

42–123 **The Discovery of India**

Four prepared class periods. For Upper Middlers and Seniors. The title of this course is taken from Jawaharlal Nehru's work written in Admadnagar Fort prison during a five-month internment in 1944. Nehru was seeking to discover India for himself as the molder of an Indian nation. We, as Englishmen before us, are attempting in this short course to begin discovery of the setting, the motivations, and the contemporary problems of an alien people who constitute the second most populous nation on earth. In the Fall Term we are especially concerned with Traditional India: geography, thought, religion, the social setting, and early history. The following Winter Term concentrates on Imperialism (British India), Gandhi, and Indian Independence. Readings may include Nehru; P. Spear, *India: A Modern History* and *India, Pakistan and the West;* H. Smith, *The Religions of Man;* A. M. Frazier, *Readings in Eastern Religious Thought;* P. Woodruff, *The Men Who Ruled India: The Founders,* Vol. I; Robert Payne, *The Life and Death of Mahatma Gandhi;* and M. Brecher, *Nehru: A Political Biography.* (Mr. Royce)

43–123 **Modern Europe: A Survey**

Four prepared class periods. Open to Upper Middlers and Seniors. The Fall Term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1789-1914, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe: the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers.

This course is designed as a three-part sequence; while each term may be taken separately, students are strongly urged to take it as a year-long commitment. Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. This course has proven to be good preparation for the Advanced Placement Examination in European History. (Mr. Richards)

44–2 **Modern Russia**

44–3 Four prepared class periods. Open to Seniors and to Upper Middlers who have permission of the instructor. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between east and west; the rise of the intelligentsia; Lenin and the Bolshevik Party; the Stalinist totalitarian system; Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs, and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural

matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used. (Mr. Richards)

45–1 **International Relations: The Present Patterns**
45–2 Four prepared class periods. For Upper Middlers and Seniors. In its essentials the
45–3 course is limited to the contemporary era of international affairs, a span of years that is now more than a quarter of a century old, extending, from the diplomacy of World War II to the current era of détante. The emphasis is upon the international politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. The course does not seek to fix praise or blame but rather to discern and comprehend the main lines of the predicament and to suggest possible alternatives. Textbooks, the periodic literature of journals, monthly and fortnightly publications, and newspapers are all employed. (Mr. Bunnell)

46–2 **Topics in the History of Phillips Academy and Abbot Academy**
46–3 Four prepared class periods or the equivalent. Involving work in the Phillips Academy and Abbot Academy Archives on some aspect of history of the schools, the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mr. Allis)

47–1 **Victorian England: England in an Age of Expansion**
Four prepared class periods. For Upper Middlers and Seniors. The course is devoted to a study of the major movements and changes that challenged the British people from 1789 to 1901. It is divided into three periods: a study of the background of 1832, the early Victorians, and the late Victorians. The final eight weeks of the course are concerned with the last two periods. Since Victorian literature more directly influences the life and thought of the times than that of any other period of English history, the course examines closely those writers whose works were influential in adapting English minds and institutions to changing conditions. (Mr. Harrison)

48–2 **The Rise and Fall of the American Presidency, 1940-1974**
Four prepared class periods. For fifteen Seniors. The course studies the extraordinary expansion of presidential power in law and practice since the 1930's. The American presidency has been the focal point of the United States government in times when vigorous government action has been called for. The Great Depression, World War II, the Cold War, the Civil Rights Revolution, the War on Poverty, and the Vietnam War—all called for the increased powers for the executive. And Presidents Roosevelt, Truman, Kennedy, Johnson, and Nixon seized the opportunities to expand presidential power. But in the Nixon administration, the nation saw executive usurpation of illegal powers, a subversion of the Constitution, and a threat of presidential tyranny. The climax was the "imperial presidency" and impeachment. The course consists of class discussions and several short analytical papers. The readings are drawn from: Clinton Rossiter, *The American Presidency,* Richard Neustadt, *Presidential Power,* Arthur M. Schlesinger, Jr., *The Imperial Presidency,* George Reidy, *The Twilight of the Presidency,* Theodore White, *The Making of the President, 1972,* Carl Bernstein and Robert Woodward, *All the President's Men,* Raoul Berger, *Impeachment,* and transcripts from the "Watergate caper," 1972-74. (Mr. Lyons)

49–12 **The City in America**
Four prepared periods. Limited to fifteen Seniors and Upper Middlers. Prerequisite: permission of the instructor. Fall Term work focuses on the role of the historian and the evolution of the city from prehistoric times through the

American colonial period. The Winter Term deals with different "types" of American cities evolving between the Eighteenth and Twentieth Centuries. General readings include: Edward Banfield, *The Unheavenly City Revisited;* Lewis Mumford, *The City in History;* Alexander B. Callow (ed.), *American Urban History;* Charles Glaab and A. Theodore Brown, *A History of Urban America;* several urban novels like Theodore Dreiser, *Sister Carrie,* and various monographs like Gunther Barth, *Instant Cities.* (Mr. Quattlebaum)

49–3 **The City in America**
Prerequisite: *History 49-1* or *History 49-2.* The student embarks on individual, historical research projects, either on a particular American city or on a selected aspect of several cities.

50–1 **Schools in America**
50–3 Four prepared periods. For Seniors and Upper Middlers. (This course is planned parallel to *History 51, Families in America,* and can be taken in a coordinated sequence with that course, as well as a single term-contained offering.) The course analyzes the purposes for schooling perceived during the nineteenth and twentieth centuries and the institutions Americans created and supported to promote those purposes. Reading is drawn from historical sources and from contemporary social science and philosophy. Students are expected to relate the material to the "aims" of their own educations. (Dr. Sizer)

51–2 **Families in America**
51–3 Four prepared periods. For Seniors and Upper Middlers. (Given parallel to *History 50.* See note under that course description.) The course examines family structure, function, and development from the colonial period to the present. Sex role, methods of child nurture, economic base of the family, and varieties of family patterns growing out of different ethnic backgrounds are among the major topics studied. Readings are drawn from primary and secondary sources. (Mr. Crawford)

52–1 **Utopias**
52–2 Four prepared class periods. For Upper Middlers and Seniors. This course focuses
52–3 on the study of Utopias from the Renaissance to Modern Times. The quest for a perfect society changes with the ages and is determined by them. From the Utopias of Humanism (Sir Thomas More, Rabelais) we observe the differences brought about by Enlightenment ideas (Locke, Rousseau). The challenge of the Industrial Revolution creates the proposals of the Utopian Socialists (St. Simon, Fourier, Owen) and of Karl Marx. Solutions to present-day problems are exemplified by B. F. Skinner's *Walden Two,* Huxley's *The Island,* and discussions of the anti-utopias of Orwell and Huxley. Comparison of what was, or is, considered an ideal society provides significant insights into the value changes of the last 400 years and the imaginative solutions proposed by men always dissatisfied with the imperfections of today. (Ms. Witten)

53–123 **Women in History**
Four prepared class periods. For Upper Middlers and Seniors. A chronological full-year sequence but may be elected on a term basis. This course studies the role and status of women in cultures and societies which have influenced and determined our own. Special attention is paid to women who typify their prescribed roles as well as those who defiled or ignored convention.

In the Fall Term, after a look at the restrictive position of women in ancient Greece, the course considers the development of an enlightened, liberal status for women in Rome. The latter part of the course focuses on the changes brought about by the emergence of Christianity and the subsequent evolution of the early Middle Ages up to the time of Charlemagne. (Ms. Clark)

The Winter Term begins with the Medieval Period which was heir to Christian Rome and then studies the part played by women in early modern times with the Renaissance and the creation of polite society with its ideal of the development of all human faculties. From the 16th century on, women as rulers successfully molded policies and subtly influenced the culture of their time. The classic age of France created the salons where men and women met on an equal basis

and where good taste and talent overcame the rigid barriers of rank and sex. With the French Revolution and Romanticism came the belief in equality and from then on the fight against Victorian double standards and for legal and political emancipation was joined. The study of the lives of outstanding women illustrate the successes and failures in the search for women's proper place. (Ms. Witten)

The Spring Term studies the women of the 19th and 20th Centuries. In 1848, a year of world revolution, a group of American feminists issued a declaration of women's independence. The statement was more one of hope than of reality. However, during the nineteenth century in this country and in England, the economic status of women began to improve and, as it did so, the hope of political, legal, social, and occupational opportunity began to be realized. The early part of the term focuses on the political feminist movement and compares it with other contemporary reform movements. Women gained the right to vote in the early twentieth century. What did women do with this right? How do the role of women in the twentieth century and the struggle of women to reshape that role reflect or reject traditional American values? The latter part of the course evaluates these and other questions by looking at individual women, both those who typify the traditionally prescribed role and those who defy convention. (Ms. Minard)

4–123 Modern Europe: An Inquiry into Continuing Issues
Four prepared class periods. For Seniors. The course, while treating modern European history, is not designed as a standard survey; rather it is an effort to convince students that an essential task of the historian is to confront live issues. As suggested in Tierney, Kagan, and William's *Great Issues in Western Civilization,* "The issues are alive because they come out of the tensions that men have to face in every generation—tensions between freedom and authority, between reason and faith, between human free will and the impersonal circumstances that help to shape our lives." Readings: C. V. Wedgwood, *The King's Peace: 1637-1641;* L. Kronenberger, *Kings and Desperate Men;* R. L. Heilbroner, *The Worldly Philosophers;* P. Rohertson, *Revolutions of 1848: A Social History;* B. Tuchman, *The Proud Tower* and *The Guns of August.* The course is divided into the following term-contained units: Fall Term, AUTHORITY AND FREEDOM: ENGLISH AND FRENCH REVOLUTIONS. Winter Term IDEALISM AND REALISM: EUROPE'S 19TH CENTURY. Spring Term, PEACE AND WAR: THE TWENTY-YEAR CRISIS. (Mr. Royce)

55–1 Art and Architecture Before the French Revolution
Four prepared class periods. For Uppers and Seniors. This course is an introduction to the Western visual arts from the Archaic sculpture of Greece to the late Baroque of the eighteenth century. Looking at major art historical epochs and problems, the course focuses on the Renaissance and Baroque. It also includes occasional visits to the Museum of Fine Arts and the Gardner Museum in Boston. (Mr. Sewall) ~~(Not offered in 1975-76).~~

56–1 Art and Architecture Since the French Revolution.
56–2 Four prepared class periods. For Uppers and Seniors. Prerequisite: Successful completion of *Visual Studies (Art 10)* or permission of the instructor. Students planning to take only *History 56* should, if possible, elect it in the Fall Term. This course discusses major movements in the visual arts since the late Baroque through the examination and comparison of representative works. The course, after introducing the mechanics of formal analysis, considers the changes in the French, English, and American arts during the late eighteenth and early nineteenth centuries, the problem of academic intolerance, and the rise of Impressionism. Looking at the development of more contemporary schools, it examines the relationship between photography and earlier media, the experiments of Cubism and Expressionism, modern architecture, Surrealism and the New York School. The course includes occasional trips to the Boston Museum of Fine Arts. (Mr. Sewall) ~~(Not offered in 1975-76)~~

Art History 57–3 American Art Reveals American Life
Prerequisite: *Visual Studies (Art 10).* Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course takes the opportunity

of the Bicentennial to look closely at the primary source material in the collection of the Addison Gallery of American Art. Providing the chance to study original works of art, the course uses the paintings, sculpture, graphics, and ship models in the Addison's collection as a basis for a survey of the arts in America. In addition to assigned reading each student works on an independent project object in the museum's collection.

History 55, History 56, and Art History 57 when taken consecutively combine to form a full year's preparation for Advanced Placement Examination in Art History.

58–123 **History of Ideas in the 19th and Early 20th Centuries**
For Seniors and Upper Middlers.

ABSOLUTISM VERSUS DEMOCRACY—The Fall Term deals with political ideologies. Authorization theories like those of Metternich, DeMaistre, deBonald, leading to Bismarck's pragmatic Real-Politik and Nationalism are discussed—from Fichte's cultural national consciousness to the vague nationalist Liberalism of the 1848 revolutionaries to its aggressive phase represented by Treitschke, the Primrose League, Imperialism, Colonialism and Racism. The development of newspapers and the mass media with its molding of public opinion forces politicians to depend on popular support for political actions and introduces emotionalism into politics. Economic interdependence and the capability of almost complete destruction through war lead to advocacy of Universalism: League of Nations, UN, Pacifism, and the attempts to replace nationalism by organizations stressing global, or at least wide regional interdependence.

FREE ENTERPRISE VERSUS REFORM—The Winter Term examines the changes brought about by the Industrial Revolution in a predominantly agricultural and traditional society by studying its exponents (Adam Smith, Malthus, Ricardo) and the reformers who, through education, factory legislation, and moral pressure, want to change Society's consciousness and improve the quality of life for the poor. This includes Liberals like Bentham, J. S. Mill, and the Fabian Socialists, Utopian Socialists like St. Simon, Robert Owen, and Fourier, the Chartist movement, and the development of Labor Unions. Finally, revolutionary movements like Marxism, Anarchism, and Syndicalism are studied as well as modern concepts which have developed through the interchange of conflicting ideas.

SCIENCE VERSUS RELIGION—The Spring Term evaluates the growing impact of Science destroying traditional ethical values. Materialism, the impact of Darwin's Theory of Evolution not only on the explanation of the environment but on Society as a whole according to Spencer, Freud's revolution in Psychology, and Existentialism create strong opposition from the various religions. Protestant and Catholic reactions against scientific truths which contradict fundamentalist certainties, the reactions of individualist thinkers like Dostoyevsky, Renan, Tolstoy, and Butler, and finally, the attempts to reconcile Science and Faith are examined. (Ms. Witten)

59–123 **Ancient History**
Four prepared class periods. For Upper Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

60–1 **Tudor England**
60–2 Four prepared class periods. For Upper Middlers and Seniors. The years when England was ruled by the Tudor family were some of the most colorful and pivotal in English history. During those years, crucial political and religious changes were initiated, creativity was encouraged, and England prospered. This study focuses on Elizabeth I and her England but the earlier Tudors are reviewed as background. The course looks not only at political and economic conditions

in England in the 1500's but at social and cultural conditions as well. The books used may include *This Realm of England* by Lacey Baldwin Smith, the Jenkins biography of *Elizabeth the Great,* and *Elizabethan Life in Town and Country* by M. St. Clare Byrne. (Ms. Minard)

61–1 **The Middle East**
61–2 Four prepared class periods. For Upper Middlers and Seniors. Few if any regions
61–3 of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroad of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. And this course traces the region's emergence from the decline and fall of the Ottoman Empire (the famous "sick man of Europe") to the present day with an emphasis upon the political and economic aspects of the leading Arab states and Israel. But, as the name Middle East implies, the area is a global intersection and its history reflects a constant interplay between the nations of Africa and Eurasia as well as a certain "presence" of the Superpowers of our time; and it is, therefore, the center of a world security problem. Hence, the course also surveys international aspects with special attention to such matters as middle eastern oil and Arab-Israeli relations. A term paper is part of the course's requirement. (Mr. Bunnell)

rdisciplinary

All courses are electives. Courses that cross over department lines are listed again here as a reference for students when planning their programs of studies.

Basics Study Skills
10–1 Permission of the instructor required. The course builds both reading and
10–2 organizational skills. The reading program seeks to increase reading efficiency
10–3 (comprehension and speed) by teaching the student how to become more thoughtfully and actively involved with his material. On the organizational level, the student is involved in skill-building in such areas as note-taking, retention, and exam preparation. (Dr. Irish)

Art **Animation**
:1–123 Prerequisite: *Visual Studies (Art 10).* An introduction into the art of illusion of motion through shooting still images by frame with 16mm sound motion picture film, with emphasis on the relationship of the sound track in structuring the finished product. Given in collaboration with the Music Department, the course may interest either the art student who wishes to explore the visual possibilities of the medium or the music student who wishes to find a vehicle for his original composition. Two class meetings plus six hours preparation.

Art **Contemporary Communications**
1–123 Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, nonfiction, poetry, drama, motion pictures, and the visual arts. Prerequisites: Successful completion of a course in art or music, and a concurrent commitment to an additional communicative endeavor in creative writing, in art, in music, in performing arts, or in some independent work in mathematics or physical science. Acceptance into the course is based on written application and personal interview. At least one term the course engages in a large group project aimed at public presentation. (Mr. Owen and Mr. Lloyd)

Classics

30–123 **Epic Poetry**
Four prepared class periods. Each term is a prerequisite for the following term. This course focuses on western epic poetry: the poems are delightful, unique

literary monuments of great importance in the development of western literature; and, they are a fascinating means of learning about Indo-European culture, human psychology and man's creative history. Fall Term deals primarily with cultural development and psychology, with a variety of readings, especially from Frazer's *Golden Bough.* Winter and Spring Terms are devoted to the epics themselves as literature and as evidence of the Fall Term's material. *Gilgamesh,* the *Iliad* and *Odyssey,* the *Song of Roland, Beowulf* and Tolkien's *Lord of the Rings* are read, as well as excerpts from other European epics.

English 11—123 **Perception and Expression/Studio**
This course, recommended for Juniors, has four prepared periods and one unprepared period. Taught jointly by members of the English and Art Departments, the course, like *Perception and Expression* (see *English 10)* also seeks to involve the student in a number of experiences intended to increase awareness in the world around us. In addition to reading, writing, and listening, students work with tape recorder and video tape, still and motion camera, and acting, involving group and individual performances in various media. This course exempts students from the photography half of *Visual Studies (Art 10).*

Russian Lit 500—1 Soviet Lit **Russian Literature in English**
Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, Westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Ostroysky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development.

501—2 **Soviet Literature in English**
Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions.

Music 29—2 **American Art and Music: Tunes and Scenes or Views and Vibes**
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Visual Studies (Art 10)* and *The Nature of Music (Music 20),* or permission of the instructors. A study of cultural life in America through art and music from its earliest times to the present. Particular emphasis is placed on the folk traditions present throughout the country's history. While exploring the connections between art and music of different periods, the class defines the differences between musical and visual expression. (Ms. Clarke and Mr. Thomas)

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late 20th century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization or dissemination of mathematical knowledge.

To serve all needs the mathematics curriculum is built around a core sequence of eight trimester courses: *11, 12* and *13* (normally given in the ninth grade); *24, 25,* and *26* (normally given at the tenth grade); and *37* and *38,* completion of which will satisfy diploma requirements and provide a firm foundation for more advanced study. A student entering in

SYNTHESIS 40-1
40-2

- SYNTHESIS: A COURSE IN COMPLEX ISSUES

The course considers two or three topics which require for their understanding the concurrent use of several academic disciplines, ones which students have studied as underclassmen. Topics such as human population growth - using, perhaps, history, mathematics, geography, and life science - or euthanasia - drawing from literature, religion, and biology - are examples of what might be offered. This is an experimental course, limited to 20 Seniors each trimester.

(Messrs. Sizer and Flanagan)

the ninth grade with little or no algebra normally starts with *Mathematics 11.* A student entering with one year of algebra takes *Mathematics 20* for one year and joins the standard sequence with *37* in his second year. Those with one year of algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 30* for one year.

Beyond the required level, i.e., the equivalent of *38*, the department offers many electives, some of which lead up to and well beyond the Advanced Placement Examinations of the College Board. The prerequisites of such courses should be carefully noted, particularly by those students who are involved in terms away from Andover.

In addition to its course offerings the department manages the campus computer time sharing system. The computer, a Digital Equipment Corp. PDP-11, is housed in the mathematics building and serves nine teletypewriter terminals, of which five are available for student use in courses and projects.

Courses Leading to Satisfaction of the Diploma Requirement:

11–1 Beginning Algebra
11–2 Five prepared class periods. An introduction to the language of algebra. The solution of simple equations and inequalities, the study of polynomials in one variable, factoring and word problems. Prerequisite: Less than half a year of algebra.

12–2 **Algebra**
12–3 Five prepared class periods. Simple functions and their graphs, systems of linear equations, polynomials in two variables, rational algebraic expressions, equations and word problems. Prerequisite: *Mathematics 11.*

12–1 Algebra
Five prepared class periods. A "lead-in" course for entering students who have had up to a year of algebra but need their skills strengthened before entering *Geometry.* It normally prepares a student for *13* but if necessary *12* is available in the Winter Term for further strengthening. Prerequisite: From a half to a full year of algebra.

13–1 Introduction to Geometry
13–2 Five prepared class periods. Simple logic, the nature of proof, congruence of
13–3 triangles, parallel lines and parallelograms. Prerequisite: *Mathematics 12, Mathematics 11-12* or the equivalent.

20–0 Geometry and Algebra
Five prepared class periods. A year-long course for entering students who have had a *strong* ninth grade algebra course but no geometry. Satisfactory completion of this course allows entrance to the normal sequence at *Mathematics 37.* Prerequisite: A strong year of algebra.

24–1 Algebra and Geometry
24–2 Five prepared class periods. The Pythagorean Theorem, area of rectilinear
24–3 figures, roots of quadratic equations, fractional equations leading to quadratics, introduction to the use of a computer, elementary coordinate geometry and its use in geometric proofs. Prerequisite: *Mathematics 13* or its equivalent.

25–1 Algebra and Geometry
25–2 Five prepared class periods. This course involves more work on the computer,
25–3 algebraic and geometric inequalities, algebraic functions and geometric transformations considered both from a geometric and functional point of view. Prerequisite: *Mathematics 24.*

26–1 Algebra and Geometry
26–2 Five prepared class periods. Geometric similarities, radicals and quadratic equa-
26–3 tions, circles, loci and an elementary study of the conic sections centered at the origin. Prerequisite: *Mathematics 25.*

30–0 Intermediate Algebra and Elementary Functions
Five prepared class periods. A year-long course for entering students with one year of algebra and one year of geometry. Completion of this course satisfies the diploma requirements. Topics include use of the computer; the structure of groups and fields, with applications to elementary algebra; polynomial, circular, exponential and logarithmic functions and their applications. Prerequisite: Credit for one year of algebra and one year of geometry.

31–0 Geometry and Circular Functions
Five prepared class periods. A year-long course for entering students who have studied algebra in the ninth and tenth grades but who have not studied geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. Prerequisite: Credit for one year of elementary algebra and one year of intermediate algebra.

37–1 Algebra and Geometry
37–2 Four prepared class periods. The coordinate geometry of conic sections extended,
37–3 circles, sectors and segments, the circular functions and their applications to solutions of triangles, elementary probability. Prerequisite: *Mathematics 26* or *20.*

38–1 Elementary Functions and Algebraic Structure
38–2 Four prepared class periods. The coordinate geometry of comic sections extended,
38–3 inverse functions, logarithm and exponential functions. The structure of groups and fields, applications of circular functions, probability. Completion of this course satisfies the diploma requirements. Prerequisite: *Mathematics 37.*

40–12 Elementary Functions (T2) (a two-term commitment)
Five prepared class periods. A two-term course for entering Seniors who have not had trigonometry but have studied three years of mathematics in high school. Required of those students whose prior work may be found not to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. In certain cases high quality work in the Fall Trimester of *40* may be regarded as satisfying diploma requirements, but the Winter Trimester of *40* is a prerequisite for continuing study at the *50* level. Prerequisite: Credit for three years of high school mathematics. Not open to students from *Mathematics 38* or *39.*

Elective Courses

Only courses with sufficient enrollment will be given.

21–3 Intuitive Calculus
Four prepared class periods. Open to Juniors and Lower Middlers. This course introduces limits in an intuitive manner and begins to develop the calculus of polynomials so useful in elementary Physics. Prerequisite: None.

39–2 Vector Algebra
39–3 Four prepared class periods. The complex number system and its application to plane geometry; algebraic properties of scalars, vectors, and matrices with geometric applications. Students with a serious continuing interest in mathematics should take this elective subsequent to *38* and prior to higher level electives. Prerequisite: *Mathematics 38.*

41–1 Exploring Data
41–2 Four prepared class periods. An introduction to techniques of uncovering the
41–3 useful information contained in masses of numerical data. In contrast to *43* and *44* no reliance is placed on the knowledge of or development of heavy mathematical tools. Prerequisite: None.

42–1 Probability
Four prepared class periods. Includes sample spaces, counting problems, sampling, conditional probability, applications using the computer, random

variables, expected value, variance and standard deviation. Prerequisite: *Mathematics 38.*

43–2 **Statistics**
Four prepared class periods. Includes applications to the normal curve of the binomial distribution, hypothesis testing and statistical inference, independent work on experiments and selected topics. Prerequisite: *Mathematics 42.*

44–3 **Statistics**
Four prepared class periods. Includes elementary statistical inference with applications to social and physical sciences. Estimation and Hypothesis Testing. Prerequisite: *Mathematics 43.*

46–3 **Theory of Numbers**
Four prepared class periods. A study of the elementary theory of numbers, emphasizing the arithmetic of the integers. First consideration given to divisibility and prime numbers, ideas that underlie much of the later work. Other topics considered are congruences, Diophantine equations (and Fermat's Last Theorem), continued fractions, and certain special numbers. Prerequisite: *Mathematics 37.* ~~(Not offered 1975-76)~~

47–1 **Computer Programming**
47–2 An introduction to programming in the BASIC-PLUS code. The solution of
47–3 mathematical problems with computer assistance. Prerequisite: *Mathematics 37* or its equivalent.

49–3 **Problems, Brain Twisters and Puzzles**
Four prepared class periods. The course investigates a wide variety of mathematical problems. The problems, whose statement may range from one short sentence to a long paragraph, are selected from sources such as prize contests and collections of mathematical problems and puzzles. Both the technique of how to begin to solve a problem and the skills needed in the actual solution are stressed. Prerequisite: *Mathematics 37.*

51–1 **Elementary Calculus**
51–3 Five prepared class periods. The first of a three course sequence that covers the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics covered include: review of functions and graphing, limits, derivatives, implicit differentiation, chain rule, and continuity. Prerequisite: *Mathematics 30* or *38.*

52–1 **Elementary Calculus**
52–2 Five prepared class periods. Curve sketching, maxima and minima problems, related rates, Rolle's Theorem, Mean Value Theorem, indefinite integral, areas, sines, cosines, logarithmic and exponential functions, and differential equations. Prerequisite: *Mathematics 51.*

53–2 **Elementary Calculus**
53–3 Five prepared class periods. Applications of the integral including areas between curves, distance and velocity, volumes of revolution, and work; techniques of integration, conic sections, and polar equations. Prerequisite: *Mathematics 52.*

54–3 **Infinite Series and Differential Equations**
Five prepared class periods. This course extends the work of *Mathematics 53* to prepare the student for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics 53* or may be taken simultaneously with *53.*

55–0 **Honors Calculus**
Five prepared class periods. A year-long course in analytic geometry and calculus which begins only in the Fall. Students contemplating Off-Campus Projects at some time during the year should not enroll in this course. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52, 53.* Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics 30* or *38*, and departmental permission.

61–0 **Calculus Continued and Other Topics**
Four prepared class periods. The course completes preparation for the College Board BC Advanced Placement Examination, but also includes additional topics at the discretion of the instructor. Prerequisite: *Mathematics 53.*

65–0 **Linear Algebra and Vector Calculus**
Four prepared class periods. For students of demonstrated ability and interest who intend to continue their study of mathematics in college. Vector spaces, linear transformations, matrices, determinants, systems of linear equations, the calculus of functions with vector arguments and vector values. Prerequisite: *Mathematics 55* or its equivalent.

Special Courses

30–1 **Mechanical Drawing (Elementary)**
30–2 Two prepared class periods and four unprepared. Not open to Juniors. A
term-contained beginning drawing course that includes the use of drawing instruments, lettering, geometric constructions and loci, sketching, orthographic projection, spatial relations, and sectioning. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31–2 **Mechanical Drawing (Intermediate)**
31–3 Two prepared class periods and four unprepared. A term-contained drawing course in applied Descriptive Geometry and Graphics involving further work in sectioning and conventions, isometric and oblique pictorial projections, intersections, revolution, primary auxiliary views, developments, and dimensioning. Prerequisite: *Mechanical Drawing 30.*

32–3 **Mechanical Drawing (Advanced)**
Two prepared class periods and four unprepared. A term-contained technical drawing course consisting of substantial work in detail and assembly engineering drawing, perspective, print reading, successive auxiliary views, and fundamentals of design. Students with special interests are given an opportunity to do additional work in a related field such as rudimentary structural or naval architectural drawing, sheet metal layout, or graphic presentations of data.
Prerequisite: *Mechanical Drawing 31.*

30–1 **Navigation (Coastal Piloting)**
30–2 Four prepared class periods. Not open to Juniors. A term-contained course in
30–3 Piloting: i.e., marine navigation within sight of land or landmarks. Substantial dead reckoning and special case plotting is done on charts and small area plots. Aids and dangers to navigation are studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, radio, radar, and Loran.

31–2 **Navigation (Celestial)**
31–3 Four prepared class periods. A term-contained course in Celestial Navigation: i.e., navigating at sea by means of the stars, sun, moon, and planets. Nautical astronomy is studied. Significant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214 and the Nautical Almanac, special lines of position, the use and correction of a marine sextant, times of observational twilight, and "a day's work" at sea.
Prerequisite: *Navigation 30.*

Modern Foreign Languages

The foreign language diploma requirement is competence at the level of the third year of a modern or ancient language. Such competence is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of eight, or even seven trimesters, by passing a special examination set by the department concerned.

All foreign languages offered at Phillips Academy are acceptable for college admission. For certain fields of concentration and in certain areas of graduate study, especially for the Ph.D. candidate, specific modern languages are often required. Consultation with academic advisors and college counselors is invited.

The *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are *not* recommended for students of limited language ability. Entering Seniors with no previous language experience must pass a *10-20* course to obtain their diplomas.

All students are encouraged to continue foreign language study beyond the minimum requirement.

rench

The French Department offers a six-year course of study. The first two years are devoted to teaching the basic language structure. In the third year, while continuing to progress in the language, a student is given the opportunity to choose the trimester courses which best serve his needs. Fourth and fifth year courses offer study in depth of both literature and civilization. Students who demonstrate unusual aptitude for and interest in the language during the first year of study are invited to enter special sections which move ahead more rapidly without demanding more time. Those who complete the accelerated sequence may meet the diploma requirement after seven trimesters as they move directly into fourth-year courses.

In all courses, students are taught to understand, speak, read, and write the language, paralleling as closely as possible the natural order of learning. French is the language of the classroom and at no time does the Department teach the art of translation.

10–0 French
Five prepared class periods. First-year French for students who have had no previous courses in the language. Students make frequent use of the language laboratory. Listening comprehension and the use of basic patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced, as well as simple reading material. Text: Capelle et Capelle, *La France en Direct.*

10-20–0 French
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence. Text: Benamou, Ionesco, *Mise en Train.* (Not offered in 1975-76).

11–0 French
Five prepared class periods. This first-level French course is designed to help the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for him to enter a regular second-level section. The course emphasizes the development of aural-oral skills and prepares for *French 21* the following year. Texts: Valette et Valette, *Lisons;* Cambell et Bauer, *Arsene Lupin.*

12–23 French (T2) (a two-term commitment)
An accelerated course offered to students of high ability. This course is continued in *French 22.* Texts: dePetra, *La Clef;* Pimsleur, *C'est la vie.*

20–0 French
Five prepared class periods. For students who have completed *French 10.* While continuing to develop the audio-lingual skills, the aim of this course is to teach reading and the ability to understand non-technical French prose without recourse to translation. Texts: Capelle et Capelle, *La France en Direct;* Valette et Valette, *Lisons.*

21–0 French
Five prepared class periods. For students who have completed *French 11* and for new students who qualify through teacher recommendation or placement examination. The aim of the course is similar to that of *French 20.* Texts: Cambell et Bauer, *La Dynamite;* Gibson, *Anthologie;* Ionesco, *Victimes du devoir;* de Petra, *La Clef.*

22–12 French
Five prepared class periods. An accelerated course open to students who have completed *French 12* and to properly qualified new students. Successful completion of this course permits students to enroll in regular courses at the third level during the spring term. Texts and reading materials are basically those of *French 21.*

Third Level Courses

At the third level, progress in all language skills continues through their application in the study of a particular area. A systematic and coordinated grammatical review is incorporated sequentially into all courses.

Independent grammar review materials have been especially prepared by the department for this study. These courses are designed to provide program flexibility trimester by trimester, but they are also considered as a year-long commitment. Thus, if taken each term over the period of one complete academic year, then a year grade will be given.

30A–123 Language Review and Contemporary French Life
Four prepared class periods. For students who have successfully completed *French 20* but who have need of further instruction in basic language structures. The Fall Term reviews the last half of *La France en Direct 2.* The last two terms are devoted to the same material as that covered in *French 30.* By permission of the instructor.

30–123 Contemporary French Life
Four prepared class periods. This course takes a close look at many aspects of modern French civilization and studies the French people's attitude towards the problems of everyday living and thinking. A journalistic and humoristic approach is prevalent in the variety of dossiers presented in the main text by Capelle et Capelle, *La France en Direct 3.*

31–123 Selected Readings
Four prepared class periods. Reading comprehension skills are developed through a study of texts such as the following: Simenon, *Le Chien Jaune;* Saint-Exupéry, *Le Petit Prince;* Pagnol, *Topaze;* Vercors, *Le Silence de la mer;* Goscinny, Uderzo, *Astérix et Obélix: Le Tour de Gaule;* Gide, *Symphonie Pastorale;* Sartre, *Les Jeux sont faits.*

32–2 Village Français
32–3 Four prepared class periods. Using *Les Deux Villages* by Wylie and Bégué as a basic text, the course, conducted in French, attempts to reveal the peculiar characteristics of the French people as reflected in the microcosm of a town. Several American and French towns are examined as bases of comparison. Additional readings may include Wylie, *Village en Vaucluse;* Lynde, *Middletown, U.S.A.;* Pagnol, *Marius;* Michaud, *Guide France,* "Nouvel Observateur"; Daminos, *Les Carnets du Major Thomson;* Maurois, *Histoire de la France;* articles written by Art Buchwald, and texts used by French students studying American civilization.

33–12 **Le Monde Francophone: French Civilization Outside of Europe**
Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the resistance to and the assimilation of French culture by the native cultures. During the Fall Term the students develop their various language skills through a study of French in Africa–West Africa, Equatorial Africa, and North Africa (Arab). In the Winter Term the emphasis is upon French in America–the Antilles (Haiti, Martinique, and Gaudeloupe), the U.S., and Canada. Together with a geographical, social, and historical study, selections are read from Président Senghor, Camara Laye, Bernard Dadie, Memmi, Aimé Cesairé, Guilaume M'Bia, Birago Diop, Félix Leclerc, and Giles Vigneault.

34–1 **Intensive Conversation and Phonetics**
34–2 Four prepared class periods. A special emphasis on specific aspects of spoken French. Intended for students who understand French rather well but need to gain confidence and efficiency in speaking. Dialogues, speeches, debates, interviews, and role-playing are reinforced by study of topical vocabulary, idiomatic expression, and applied phonetics.

35–1 **Written Expression**
35–2 Four prepared class periods. Study and writing of basic sentence structures and
35–3 their integration into paragraphs and compositions. Students' writing, to which instructors give close, individualized attention in small classes, is based generally on selected, short readings such as those in *Creative French,* Hammond & Barrow eds. or *R.S.V.P.: Invitation à Ecrire* by Beaujour and Regalado. The course seeks a balance between different forms of writing, both original and imitative, (description, narration, dialogue, exposition, communication). This course is recommended for students planning to take *French 42.*

36–123 **Literature and Film**
Four prepared class periods. This course studies a variety of French novels and plays and the films which have been made based on these works. After the book has been read, the film is viewed several times and is examined to see if, how, and why the two versions differ. For those films which are not adaptations of existing books, but for which published scenarios exist, the latter are read and studied before viewing the film. Each term, approximately two different book/films are studied, and might include such works as: Sartre, *Les Jeux sont faits;* Arnaud, *Le Salaire de la peur;* Queneau, *Zazie dans le Métro;* Pagnol, *Marius;* Bernanos, *Mouchette.*

38–3 **French for Tourists**
Four prepared class periods. The aim of this course is to provide the practical vocahulary needed to cope with everyday situations: how to handle affairs at the airport; going through customs; making a hotel reservation; taking a taxi, the subway, or a bus; visits to the bank, the hairdresser, or the doctor; buying clothes or footwear; going to a restaurant, the movies, or the theater; how to use the telephone; travel by train; motoring; and visiting a seaside resort. Emphasis is on oral communication and the acting out of situations in class, supplemented by regular use of the language laboratory.

39–3 **Initiation to the French Theatre**
Four prepared class periods. An active participation course in which the student follows one play from the initial reading through its final production, taking part at each step of the way. Four major phases: Reading, Analysis, Production, Performance. Throughout the course, the vocabulary of French theatrical production is studied and used.

40–123 **French**
Four prepared class periods. The course consists of three term-contained units and may include the reading of French classics and the works of modern authors, as well as conversation and composition. The choice of texts in each trimester is determined by the class and the instructor.

42–0 French Literature
Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open to all students who have completed three trimesters of third-level courses and who have the approval of their instructor, and to properly qualified new students. It is a transition from the study of language to the study of literature. Emphasis is placed on vocabulary building, written work, and close analysis of major literary works. Texts include: Camus, *L'Etranger;* Voltaire, *Candide;* Molière, *Le Bourgeois gentilhomme;* Balzac, *Le Colonel Chabert;* and Mauriac, *Therese Desquéyroux.*

This course is also offered in the School Year Abroad program in Rennes.

43–123 French Civilization
Four prepared class periods. Open to well-qualified Upper Middlers and Seniors who have completed three trimesters of third-level courses and to new students with departmental approval. Students who elect this course should be interested in France's cultural achievements, influence, and contemporary life. The course is a combination of lectures by instructors, class discussions, slide and film presentations, students' oral reports, and written themes on a wide variety of topics. It is complemented occasionally by the reading of short literary and historical selections illustrating cultural and artistic developments. Areas of study include history, geography, economics, art and architecture, music, as well as modern French institutions, French youth, and the role of women in French society. The Paris weeklies L'Express and Paris-Match are read and used extensively by students in the third trimester. The course is taught jointly by several members of the department.

This course is also offered in the School Year Abroad program in Rennes.

44–2 Québec et les Québécois
A study of the culture of the Province of Québec, which examines its history; its social, political, and economic institutions; its religious, educational, and artistic life; its achievements, frustrations, and aspirations. Emphasis is on close study of the media of the Province. The course may culminate in a trip to Québec.

50–123 French
Four prepared class periods. Open to students who have completed the fourth level but do not wish advanced placement. The choice of texts is determined by the class and the instructor and runs the gamut from *Astérix* to the theater of the absurd. It is taught principally through seminar discussions and conversations, with occasional oral readings and composition.

51–0 French Language
Five prepared class periods. A course designed to meet the requirements of the new Advanced Placement Examination in French Language. Open by invitation to students who have completed *French 40* or *French 43* and to qualified new students. Emphasis is placed on grammar, vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals.

52–0 French Literature
Five prepared class periods. The second year of a two-year sequence, open to students who have completed *French 42* and to others who are properly qualified, with departmental permission. This course is an introduction to French literature and prepares for the Advanced Placement Examination in French Literature through the close reading of representative texts including: Corneille, *Le Cid;* Molière, *Le Tartuffe;* Racine, *Brittanicus;* Stendhal, *Le Rouge et le Noir;* Baudelaire, *Les Fleurs du mal;* Sartre, *Huis clos;* Ionesco, *Rhinocéros;* and poetry of Hugo, Vigny, Verlaine, Rimbaud, and Apollinaire.

This course is also offered in the School Year Abroad program in Rennes.

60–123 Contemporary French Literature
Four prepared class periods. Open to students who have completed the fifth-level

and to other well-qualified students with departmental approval. The course consists of three term-contained units covering THE PRE-WAR NOVEL, DRAMA, and THE POST-WAR NOVEL, respectively. Authors studied may include: France, Barrès, Proust, Gide, Céline, Bernanos, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Montherlant, Anouilh, Giraudoux, Aymé, Camus, Sartre, and Robbe-Grillet. *French 60* is not a literary history course. Emphasis is on particular writers and what they add to our understanding of the human condition in our times.

Senior Projects
Seniors who are taking an advanced French course or who are otherwise qualified may do apprentice teaching during either the Winter or Spring Term. They study the techniques and methods of modern language instruction; and they practice, under careful supervision, in beginners' classes. Seniors may also undertake independent study projects in French under the direction of a faculty supervisor.

erman

The German Department offers a six-year course with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. The more advanced courses give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. German is used as the classroom language. Extensive use is made of the Language Laboratory.

The Department offers an accelerated course, *German 22*, for students who show unusual ability in *German 10*. After completion of *German 22*, these students enter *German 40* and receive four years of credit after three years of study.

10–0 German
Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Text: Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner.*

10-20–0 German
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence.

20–0 German
Five prepared class periods. The systematic study of basic patterns and grammar is continued with Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner.* Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten;* Schnitzler *Der blinde Geronimo;* Remarque, *Drei Kameraden;* Bichsel, *Kindergeschichten.*

22–0 German
Five prepared class periods. An accelerated course for qualified students, covering material of both *German 20* and *German 30.* Successful completion enables a student to enter *German 40.*

30–0 German Literature
Four prepared class periods. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review.* Some of the books read include Brecht, *Kalendergeschichten,* Dürrenmatt, *Der Richter und Sein Henker;* Aichenger, *Der Gefesselte*

und andere Kurgeschichten; Dürrenmatt, *Der Beusch der alten Dame.* Emphasis is placed on reading, comprehension, vocabulary building, and oral work.

40–123 German Literature
Five prepared class periods. Introduction to German Literature. This course prepares for the Advanced Placement Examination. Through detailed stylistic analysis of a number of outstanding works, the students gain an acquaintance with some of the major authors and most significant trends in German literature since 1750. The works read include Brecht, *Der kaukasische Kreidekresi;* Büchner, *Woyzeck;* Dürrenmatt, *Die Physiker;* Hauptmann, *Bahnwärter Thiel;* Hesse, *Siddharta;* Kafka, *Die Verwandlung;* Mann, *Tonio Kröger;* and selected poems from Goethe to the present.

50–123 German
Four prepared class periods. Contents vary according to the needs and interests of the students.

60–123 German
Four prepared class periods. Contents vary according to the needs and interests of the students.

Senior Project
Under the guidance of a member of the German Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class or work of his own choice in a special field.

Italian

10-20–0 Italian
Five prepared class periods. Open to Seniors. Open to Uppers by permission of the instructor. A year-long accelerated introductory course covering two years in one. Because students usually come with a background in other languages, progress in speaking, reading, and grammar is quite rapid.

Russian

The Russian Department offers a course of four years of study. An accelerated sequence enables able students to complete four years' work in three, and receive four years of credit. There is also an accelerated course for Uppers and Seniors.

Since Russian is, indeed, more "foreign" to native speakers of English than the traditional languages of Western Europe, the complete exclusion of English during the first term is impractical. However, it is the policy of the Russian Department to attain the exclusive use of Russian, instructional and conversational, no later than mid-way through the first year's study, and from the first meeting of the accelerated sequence *(12).* The entire program develops skill in speaking, aural comprehension, reading, and writing.

10–0 Russian
Five prepared class periods. Open to Juniors, Lower Middlers, and Upper Middlers. A year-long elementary course in speaking, listening, reading, and writing. Texts: von Gronicka, *Essentials of Russian* (Prentice Hall); Bash, *Uchebnik Russkovo Iazyka,* Part I; Reference materials.

12–23 Russian (T2) (a two-term commitment)
Five prepared class periods. Especially competent students will be recommended

for this accelerated course at the conclusion of one trimester of *Russian 10*. Successful completion of two terms of *12* enables one to enter *22*. Texts are essentially the same as those used in *Russian 10* and *Russian 20*.

10-20–0 Russian
Five prepared class periods. Open to Seniors. Open to Uppers by permission of the instructor. A year-long accelerated introductory course covering two years in one. Texts: *ALM Russian Level One* and *Two* (Harcourt); *Graded Russian Readers* (Heath).

20–0 Russian
Five prepared class hours. Completion of the elementary course with continued emphasis on active use. Texts: von Gronicka, *Essentials of Russian* (Prentice Hall); Bash, *Uchebnik Russkovo Iazyka,* Part 1; Reference materials, and selected literary materials.

22–0 Russian
Five prepared class hours. A year-long accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

30–0 Russian
Four prepared class periods. Reading, conversation, and writing, based on a variety of authors. Texts: S. Khavronina, *Russian as We Speak It* (Progress-Moscow); Bash, *Uchebnik Russkovo Iazyka,* Part 2, and selected Soviet literary materials.

40–123 Russian
Fall Term, SOVIET PROTEST LITERATURE. The development of protest in the Soviet Union as seen through the works of Zamyatin, Solzhenitsyn, Tertz, Daniel, Yevtushenko, Okudzhava and others.
Winter Term, THE SOVIET PRESS. A view of the Soviet systems as reflected in the media. The text is a subscription to a major Soviet newspaper.
Spring Term, SOVIET POETRY. Reading and analysis of the poetry of Pasternak, Rozhdestvensky, Yevtushenko, Akhmadulina, Voznesensky, Brodsky, and others. The sequence of these topics may be altered according to the needs and interests of the students.

Comparative Literature Courses in Translation

Russian Lit 500–1 Russian Literature in English.
Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, Westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontove, Gogol, Turgrenev, Gonsharov, Ostroysky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development.

Soviet Lit 501–2 Soviet Literature in English.
Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions.

Senior Project

Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may include supervised teaching of an elementary class or work of his own choice in a special field.

SPANISH

The Department of Spanish offers a sequence of four years; able students, by accelerating after the first year, may complete five courses. The aim is to have the students understand the language and speak it fluently. Spanish is used constantly in the classroom. The students learn to read and write the language with ease, and are given a comprehensive introduction to the literature and culture of Spanish and Hispanic America.

10–0 Spanish
Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. The basic texts are: *Español: A Descubirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill) and *Cuaderno de Ejercicios,* by Schmitt, Woodford and Marshall (McGraw-Hill). They are supplemented by language laboratory practice and other audio-visual materials. Exercises and reading and writing are introduced after the student has acquired confidence in oral expression.

10-20–0 Spanish
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence. The basic texts are *Español en Español,* by A. A. Graupera and F. Pace (Van Nostrand Reinhold Co.)*; Gramática Española de Repaso,* by F. Ugarte (The Odyssey Press), and selected readings. Past readings have included such books as: *Cuentos Americanos,* ed. D. D. Walsh (Norton); and *Lluvia roja,* by Jesús Goytortua (Appleton-Century-Crofts).

15–0 Spanish
Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20.* The course stresses the oral use of the language. Outstanding performance in this course qualifies the student for *Spanish 22* or *Spanish 30.* Text: *Español en Español,* by A. A. Graupera and F. Pace (Van Nostrand Reinhold Co.) and selected readings. Past readings have included: *Cuentos americanos,* ed. D. D. Walsh (Norton).

20–0 Spanish
Five prepared class periods. A continuation course that emphasizes speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Español: A Sentirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill). Readings beyond the basic text are selected to meet the needs of each class.

22–0 Spanish
Five prepared class periods. Open to students who have completed *Spanish 10* with honors and those who can earn honors through the Fall Term of this course. It covers the equivalent of the material of *Spanish 20* and *30.* Successful completion enables a student to enter *Spanish 40* or *42.* The basic texts are: *Español: A Sentirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill); *Cuentos americanos,* ed. Walsh (Norton); and selected readings. Past readings have included: *En la ardiente oscuridad,* by Buero Vallejo (Scribner's); *El sombrero de tres picos,* by Alarcón (Macmillan); and *Doña Perfecta,* by Pérez Galdós (Dell Publishing Co.).

30–123 Spanish
Four prepared class periods. An advanced course, which continues to develop oral and aural skills, as well as facility in written composition. Texts (supplemented by additional reading): *Gramática Española de Repaso,* by F. Ugarte (The Odyssey Press); *Nosotros somos Dios,* by Wilberto Cantón, edited by Trifilo and

Soto-Ruiz (Harper and Row); *El Cuento,* ed. by J. A. Crow and E. J. Dudley (Holt, Rinehart and Winston); *Doña Perfecta,* by Pérez Galdós (Dell Publishing Co.); and selected reading.

31–123 Spanish
Four prepared class periods. Group projects in Self-Expression. Designed for students who wish to improve their skills in listening, speaking, reading and writing. Basic material is selected from newspapers, short stories, satirical essays, news broadcasts, slides and filmstrips. Each student participates actively in the daily conversation exercises and writes at least one composition each week. Special needs of students who plan to work in a Spanish speaking community or travel in a Spanish speaking country can be considered. Present text is: *Conversación y Contraversia: tópicos de siempre,* by A. C. Díaz and N. R. Iorillo (Prentice-Hall).

40–123 Spanish
Four prepared class periods. The purpose of the course is to introduce the student to the Hispanic world through the study of its history and literature. Texts: *Tesoro Hispánico,* ed. Lado et al. (McGraw-Hill); *El Burlador de Sevilla,* by Tirso de Molina (Taurus Ediciones); *Doña Bárbara,* by Rómullo Gallegos (Fondo de Cultura Economica); *Poesía Hispánica,* by A. A. de Del Río (Holt, Rinehart and Winston).

42–123 Spanish
Five prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a fairly fluent ability in conversation. Constant use of the Spanish language in the classroom discussions and written assignments are required. Particularly able students may take the Advanced Placement Examination if they so desire. The basic texts are: *La dama del alba,* by Casona Losada); *Poesía Española,* by Marín (Las Américas Publishing Co.); *Teatro selecto,* by F. García Lorca (Las Américas); *Abel Sánchez,* by Unamuno (Austral); *El túnel,* by Sábato (Editorial Sudamericana); *La familia de Pascual Duarte,* by C. J. Cela (Appleton-Century-Crofts); and *Los de abajo,* by Azuela (Fondo de Cultura Económica). Novels, plays, and essays found in such collections as *Biblioteca Clásica Ebro* and *Clásicas Castellanas* are also read.

52–123 Spanish
Five prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *42,* or with the permission of the instructor. The emphasis of this course is based on a study in depth of two significant authors each term. In the past the following texts have been used: *Cien años de soledad, La Malahora,* by García Márquez (Editorial Sudamericana, Buenos Aires); *Historia universal de la infamia,* by Borges (EMECE, Argentina); *En torno al poema,* ed. García Montoro and S. A. Rigol (Harcourt Brace, World); *Tres novelas ejemplares, y un prólogo,* by Unamuno (Austral); *Yerma* and *La casa de Bernarda Alba,* by García Lorca (Losada); *Cantos de vida y esperanza,* by Rubén Darío (Austral); *La familia de Pascual Duarte,* by Camilo José Cela (Appleton-Century-Crofts); *El árbol de la ciencia,* by Pío Baroja (Alianza Editorial); *Sonatas,* by Valle Inclán (Austral); and outside reading.

sic

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of Music, which is satisfied by *The Nature of Music (Music 20).* This course is also a prerequisite for courses in the History and Appreciation category, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the academy: *Music 20* or its equivalent. Entering Seniors need not take a Music course. Exemption from *Music 20*

as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

Applied

10–1 Beginning Instruments
10–2 Three prepared class periods. Open to Juniors, Lower Middlers, and Upper Mid-
10–3 dlers. Each section of instruments meets three times a week. On non-class days individual practice is required. Each section is taught separately without mixing woodwinds, brass, or strings. After completion of the course, a student should be able to progress to individual private instruction. Instruments taught: flute, clarinet, trumpet, trombone, tuba, and orchestral strings. Limited enrollment.

A fee of $10 per term is charged for rental of school-owned instruments.

11–1 Beginning Recorders
11–2 Pass/Fail. Three prepared class periods. Open to all classes, but only to those
11–3 students who have not had previous experience. It is designed for the very beginner. There is a fee of $10.00 per person to cover the cost of a recorder, an instruction book, and other material used. Enrollment is limited to twenty students per term.

12–123 Brass Ensemble
Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. The group has an opportunity to perform in Chapel and in other concerts. The ensemble is made into different types of groups, such as trios, quartets, quintets, and double brass choirs, to perform Renaissance, Baroque, and contemporary brass literature.

13–123 Woodwind Ensemble
Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. The ensemble is organized to allow a unique and comprehensive experience in the study and performance of chamber music repertory, in varied sizes of ensembles. Playing chamber music is an essential part in the development of the woodwind student.

14–123 String Ensemble
Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. These students find a wealth of fine music written for various combinations of instruments, ranging from the relatively easy to the very difficult. Over the centuries composers have considered the strings a favored group. Chamber music is a particularly rewarding experience and is valuable training for all string students.

15–123 Fidelio Society
Three prepared periods. Open to all classes. This small group of mixed voices is selected from the *Chorus (Music 17).* It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus.*

16–123 Band
Four prepared periods. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating. Volunteers from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given.

17–123 **Chorus**
Four prepared periods. Open to all qualified students. The *Chorus* is the academy's major singing group, comprised of mixed voices, and performs a variety of choral works, both sacred and secular. Its several concerts are held on campus and off including the annual Methuen Memorial Music Hall concert. Membership is by audition in which the following factors will be considered: range, tone, hearing and imitating pitches and rhythms, and reading music. The ability to read music is not required, if other factors are good. Audition material may be obtained from the Music Department Office before trying out.

18–123 **Chamber Orchestra**
Four prepared class periods. Open to all classes. Most of the music played is for string orchestra; the best winds in the school are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate.

19–123 **Private Instrumental and Vocal Lessons**
Weekly instruction in keyboard, orchestral, and band instruments in classical guitar, or in voice. For private instruction, covering piano, organ, voice, classical guitar, orchestral and band instruments, there is a separate charge of $65 per term for half-period instruction, or $130 per term for full-period lessons and a nominal fee for the use of practice pianos and organs. A fee of $15 per term is charged for private rental of school-owned instruments. It is sometimes possible to make arrangements for an advanced student to study with members of the Boston Symphony Orchestra or other instructors who are specialists. A student must assume costs of lessons and transportation.

20–1 **The Nature of Music**
20–2 Four prepared class periods. This course is designed to give a general background
20–3 in the history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students receive some first hand experience with musical instruments. No previous experience in music is required.

For an Interdisciplinary Course in Animation, See Art 21.

History and Appreciation

The following sequence of courses in the history and literature of music is team-taught by members of the department. The sequence takes one and two-thirds years to complete. Courses on *Baroque Music* and *Classical Music* will be given in the Fall and Winter Terms of 1976-1977. The sequence will be offered again, beginning with *Medieval and Renaissance Music* in the Spring of 1976. Each course is term-contained.

The Nature of Music, (Music 20) is a prerequisite for all courses in this section.

22–3 **Medieval and Renaissance Music (to 1600)**
Four prepared class periods. Open to all classes. This course surveys what is commonly called Early Music, from the earliest known chant to the fully developed Renaissance motet and madrigal. Much of the music from this period was written "for the glory of God." But the secular side of things is considered, too, especially the rise of instrumental music (for harpsichord, recorder, etc.) and the madrigal, with its texts of love, nature, and humor.

23–1 **Baroque Music (1600-1750)**
Four prepared class periods. Open to all classes. This course surveys music from the first opera to the late works of Bach and Handel. The grand, dramatic styles known as Baroque are seen in its most lavish form, opera, in choral masterpieces such as the *Messiah,* in sacred music such as Bach's organ works, and in instrumental music such as the Brandenburg Concertos. The settings for this music, from the relatively humble churches of Bach's Leipzig to the magnificent Palace of Versailles are considered. (Not offered 1975-76).

24–2 **Classical Music (1750-1820)**
Four prepared class periods. Open to all classes. In this relatively short period grew and flourished what is considered the Classical style of Western music, and with it came the newly-created symphony. Haydn, Mozart, Beethoven, and others wrote in this new form as well as composing concertos, sonatas, string quartets, and some of the older forms, such as opera and religious music. The historical backdrop to this music—the Enlightenment, the Revolution (American and French), and the Napoleonic Era—are also considered. (Not offered 1975-76).

25–1 **Romantic Music (1820-1900)**
Four prepared class periods. Open to all classes. The Romantic period is an era of great social, economic, and political change. From the later works of Beethoven through the works of Débussy, we trace the development and change of the "classical" structures. Schubert, Schumann, Mendelssohn, Brahms, Chopin, Liszt, Berlioz, Wagner, Mahler and Strauss are some of the composers that are examined.

26–2 **Twentieth Century Music (1900-Present)**
Four prepared class periods. Open to all classes. The twentieth century is a period of abstraction, and reaction, in art and music. New rhythmic and harmonic languages were developed and used. This course traces the development of the twentieth century style through the works of Débussy, Ravel, Scott Joplin, Stravinsky, Bartok, Ives, Schönberg, Partch, and other major figures in the twentieth century music world.

27–2 **Independent Study in the History and Literature of Music**
27–3 Four prepared class periods. Open to Upper Middlers and Seniors. A student who has taken at least one of the other courses in this sequence may, with the permission of the instructor, pursue an independent course of study in either a particular type of music of a particular period of music. This should be related to the period or periods covered in the student's previous course work in this sequence.

28–3 **Jazz**
Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W. C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

29–2 **American Art and Music: Tunes and Scenes or Views and Vibes**
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Visual Studies (Art 10) and The Nature of Music (Music 20),* or permission of the instructors. A study of cultural life in America through art and music from its earliest times to the present. Particular emphasis is placed on the folk traditions present throughout the country's history. While exploring the connections between art and music of different periods, the class defines the differences between musical and visual expression.
(Ms. Clarke and Mr. Thomas).

Theory

30–1 **Orchestration I**
Three prepared class periods. Open to Lower Middlers, Upper Middlers and

Seniors. A comprehensive study of all orchestral and band instruments and their use in these organizations. Instruments in each section (strings, woodwinds, brass, and percussion) are studied separately, as well as instruments which are not a regular member of the orchestra or band, i.e., piano, organ, etc. Demonstrations of all instruments are given by faculty members and competent students, as well as by recordings and tapes. This course prepares the student for the Winter Term course in *Orchestration II (Music 31).* Prerequisite: the ability to read music. (Not offered in 1975-76).

31–2 **Orchestration II**
Three prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors, who have taken in Fall Term *Orchestration I (Music 30).* This course is designed to teach arranging for each instrument in their separate choirs, the combination of instruments of other choirs, instrument substitution, and gradually increasing into full orchestration for symphony orchestra and symphonic wind band. Prerequisites: some knowledge of harmony, and *Orchestration I (Music 30),* or by special permission of the instructor. (Not offered in 1975-76).

32–3 **Conducting**
Three prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course teaches the student to cope with the problems of rehearsals of musical organizations. The student learns the techniques and patterns of conducting, and the reading and analysis of scores. Students use recordings, and may have the opportunity to conduct the school orchestra, band, and chorus. Prerequisite: the ability to read music. Suggested prerequisite: *Orchestration I (Music 30)* and/or *Orchestration II (Music 31),* or by special permission of the instructor. (Not offered in 1975-76).

33–1 **Theory of Music I**
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34–2 **Theory of Music II**
34–3 Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35–1 **Theory of Music III**
35–3 Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music II* or permission of the instructor. This course includes advanced figure bass, more complex chords, and a brief introduction to 19th and 20th century techniques.

rforming Arts

All courses are electives, open to Seniors, Uppers, and Lowers, but to Juniors only with permission of the instructor, unless otherwise noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experiences is available: some courses are performance-oriented; some are theory-oriented; some are both. Theatre students are encouraged – but not required – to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which for three years has become part of an exchange program with schools in England, touring with *Our Town, Harvey,* and *The Fantasticks* during spring vacation.

Theatre Courses

20–12 **Introduction to Theatre (T2)** (a two-term commitment)
Four class periods. Open to all classes. Using both classical and modern scripts to provide a range of dramatic experiences, the class studies plays in depth and detail to see how they might be acted, directed, and staged, beginning with script analysis and ending with the staging of scenes and the design and construction of sets and props. Playwrights who might be studied are Miller, Wilder, Shakespeare, Guare, and Brecht, but the choice of plays depends largely upon the interests of the students. The course is intended for students with limited experience in high school theatre and serves as an overview of the major areas of theatre: acting, directing, design, and lighting, each of which might be studied in depth in subsequent courses. (Mr. Bellizia)

21–1 **Introduction to Acting**
21–2 Four class periods. Open to all classes. This course is designed for students with little or no acting experience. By doing exercises, readings, improvisations, and scenes from a wide variety of sources (including perhaps Shakespeare, musical comedy, modern plays, and short stories), a student who is curious about the theatre may determine whether he or she has ability or interest in acting. The emphasis is on the variety of acting experiences rather than on a polished final product. Videotape and tape recorders are available for use as study tools. (Mr. Bastian)

22–2 **Public Speaking**
22–3 Four class periods. Open to all classes. The course has a dual objective: to learn how to speak easily in front of others, and to learn how to speak English well. Students give prepared and extemporaneous speeches on a variety of topics while studying diction, pronunciation, projection, and other techniques of public speaking.

23–2 **Acting Workshop**
23–3 Four class periods. A theoretical and practical consideration of various acting styles, both classical and contemporary, for students with some acting experience, this course employs acting exercises, theatre games, improvisation, and scenes from plays to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he may remove himself from himself. (Mr. Bellizia).

24–3 **Scene Study**
Four class periods. Prerequisite: *Theatre 20* or *21*, or significant production experience. For serious, self-motivated students of acting who wish to study one play and one character in depth, this course might be taken in conjunction with the playing of a role in a musical or dramatic production. (Mr. Bastian)

25–1 **Directing Workshop**
Four class periods. Dedicated to the idea that the director's job is the most complex in theatre, the course is designed for students who have had some acting experience and who now wish to study the art of directing. Class members experiment with manageable scenes and short plays which they direct; they examine books on the subject (such as Peter Brooks' *The Empty Space* and Cole and Chinoy's *Directors on Directing)* and play scripts, and various styles of direction, interpretations of scenes, and types of drama from classical and contemporary periods. Emphasis is placed on the responsibilities of the director: to his actors, his audience, and his playwright. (Mr. Bellizia)

26–3 **Stagecraft**
Four class periods. Open to all classes. Through practical experience in designing, building, and lighting for plays currently being produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. Text: Parker and Smith, *Scene Design and Stage Lighting.* (Mr. Owen)

27–3 **Play Production**
Four class periods. Open to all classes. Prerequisite: any other Theatre course or significant production experience. This course is oriented toward a performance at the end of the term of a group acting, directing, and design project. The specific text depends somewhat upon the ability and interest of the group, but recent choices have favored the production of dramatic works such as *The Crucible* and *Under Milk Wood.* (Mr. Bellizia)

28–2 **Shakespearean Workshop**
Four class periods. Open to all classes. An intensive study of several plays by Shakespeare, with the major emphasis on the spoken word. Close attention is given to pronunciation, diction, rhythm, dynamics, and interpretation. Students read aloud, act out, memorize, present, and record scenes and soliloquies. (Mr. Kirkland)

See English 508 for a course in Modern Theatre.

29–23 **Playwriting**
Four class periods. Each student is expected to write at least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by Sophocles, Shakespeare, Goldsmith, Ibsen, Williams, Miller, Becket, and Ionesco, and selected literary criticism focused on drama. (Mr. Owen)

Dance

30–123 **Introduction to Dance**
Four prepared class periods. A formal course in movement and composition which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance.

losophy and Religion

All courses are elective. The courses in philosophy and religion are intended to introduce students to some of the fundamental questions arising out of human experience. Courses at all levels attempt to develop and combine a capacity for critical analysis and a sensitive appreciation of various beliefs and values. They further seek to point to the possibility and the significance of relating religious and philosophical experience and insight to the problems of everyday living. The source materials are therefore drawn from secular writing and art forms as well as the forms of expression traditionally viewed as sacred.

Religion

20–1 **The Religions of Man in Human Communities**
20–2 Four prepared class periods. Open to Juniors and Lower Middlers. "Reality is
20–3 One; but seers speak of it in different ways." Think about the implications of that statement, along with the assertion, "There is no god but God, and Mohammed is the messenger of God." Or, "Come and see for yourself how our existence is ordered!", a challenge from a contemporary religion, may or may not lead to the assertion that "God is light, and in him is no darkness at all."

In this course, an introductory brush up against Hinduism, Buddhism, Chinese religious traditions, Islam, Judaism, and Christianity is designed to clarify the proposition that mankind is unavoidably religious.

30–1 **An Introduction to World Religions**
30–2 Four prepared class periods. Open to Upper Middlers and Seniors. You may
30–3 practice Yoga, or know something of Zen, or have heard of the Lotus Sutra; you may meditate on Yang and Yin; you may be informed and sensitive enough not to refer to "Mohammedanism." Or you may know nothing of any of these things. This course attempts to explore a variety of religious experiences as expressed in some of the major religious traditions of mankind, with an eye always on the underlying question: "Is man necessarily and incurably religious?" Readings, lectures, films, discussion introduce you to Hinduism, Buddhism, Confucianism and Taoism in Chinese culture, and to Islam – as seen out of the background of western Biblical faith, Judaism, and Christianity.

31–1 **The Old Testament – An Introduction**
31–2 Four prepared class periods. Open to Upper Middlers and Seniors. This introductory
31–3 course in the Old Testament gives the student an opportunity to become familiar with one of the oldest and greatest works in all of literature. This study includes attention to all three canons of the Old Testament: *The Torah, The Prophets,* and *The Other Writings.*

32–1 **The New Testament**
32–2 Four prepared class periods. Open to Upper Middlers and Seniors. An introductory
32–3 course in the New Testament providing an analysis of the *Gospels of Matthew, Mark, Luke,* and *John; The Letters of Paul;* and *The Book of Revelation.*

34–1 **Religion in American History and Culture**
34–2 Four prepared class periods. Open to Upper Middlers and Seniors. This course is concerned with the planting of the churches from Europe in the new environment of the North American Colonies and the development of their distinctive religious life and institutions – from the Puritans to the Mormons in the expression of religious freedom.

35–3 **Religious Figures**
Four prepared class periods. Open to Upper Middlers and Seniors. The course examines through the use of biography the deep experiences that influenced and shaped the human life of outstanding religious figures from varying religious communions. Each student studies and presents a biography on the life of some selected religious figure. Such figures as Albert Schweitzer, Gandhi, Martin Luther, Einstein, and Martin Luther King, Jr., are studied.

36–123 **Community Service Independent Project**
Pass/Fail. Seniors and Upper Middlers may be permitted to do certain community service projects as an Independent Project. Such projects must be arranged in consultation with the Director of Community Service and are under his supervision. Possible placements: an urban public elementary school, a home for emotionally disturbed children, an inner-city multi-service social agency, etc. Application for this course is done in the same manner as all other Independent Projects.

Ethics

40–1 **Contemporary Ethics**
40–2 Four prepared class periods. Open to Upper Middlers and Seniors. The course
40–3 focuses on man's contemporary ethical-moral dilemmas, with attention to his psychological functioning in relation to his ability to form deep personal relationships, relate to his technosocial environment and himself, in shaping values in Contemporary Society. Readings include *Art of Loving,* Fromm; *The End of the Road,* Barth; *A Clockwork Orange,* Burgess; *Future Shock,* Tofler, etc.

41–1 **Naturalistic Ethics: a Study of Criteria of Good and Bad Conduct**
41–2 Four prepared class periods. Open to Upper Middlers and Seniors. Norms or
41–3 standards of right and wrong may be discovered or established from an analysis of the way people actually behave, from an analysis of what they value. The

course focuses on the criteria for moral decision and action developed empirically within such value-systems as cultural relativism or absolutism, hedonism, utilitarianism, pragmatic situationism, a theory of self-realization, etc., and attempts to discern functioning relationships among the criteria. Ethical "case studies" are used to focus the issues.

42—1 **Law and Morality: A Study in Political Philosophy**

42—3 Four prepared class periods. Open to Upper Middlers and Seniors. This course consists of a critical examination of an intricate web of problems concerning the relationship between law and morality. Some of the major questions asked are (1) Does society ever have the right to legally restrict an individual's private (moral or immoral) behavior? (2) How much, if any, of "popular" morality should society incorporate into law? (3) Is one ever morally justified in breaking a law? If so under what circumstances? (4) Should there be laws at all? Readings from Plato, Thomas Hobbes, J. S. Mill, Lord Patrick Devlin, O. W. Holmes, Abe Fortras, M. L. King, Jr., and Ayn Rand.

43—2 **Ethical Issues in the Sciences**

43—3 Four prepared class periods. Open to Upper Middlers and Seniors. The number of scientifically related ethical issues has increased significantly in recent years with the growth of the human *sciences* and their corresponding *technologies.* Biological research has spawned the technologies of population control, life prolongation, and genetic engineering. Psychological and Neurophysiological research has given birth to the technologies of psychotherapy, behavior modification, and psychosurgery. And a slew of difficult ethical problems have arisen in the wake of these astounding developments: Is one morally justified in attempting to extend human life when famine and overcrowding are already resulting from the excessive number of living human organisms? Or does one have a moral duty to do anything possible to save or prolong a human life? For that matter do I have a right to choose not to have my life medically or surgically prolonged? Is one ever morally justified in tampering with natural genetic processes? If so under what circumstances? Is one ever morally justified in deliberately attempting to modify the behavior of another individual? Is psychosurgery morally justified? If so who decides when it is justified? The course consists of a critical examination of these and related problems concerning the morality of implementing the human technologies. Readings include texts and articles on abortion, euthanasia, population control, behavior modification, genetic engineering, and psychosurgery.

Philosophy

50—1 **Existentialism and Philosophy**

50—2 Four prepared class periods. Open to Upper Middlers and Seniors. This is a lecture and discussion course concerned with tragedy, individualism, suffering, and making decisions. The course not only examines positions that proclaim man's integrity in a purposeless world, but also brings to the student's awareness religious existentialism, which proclaims man's faith in the created world. Readings include some of the works of Sartre, Camus, Kafka, and Kierkegaard.

51—1 **The Existence of God**

Four prepared class periods. Open to Upper Middlers and Seniors. This course is aimed at critically assessing the most fundamental presupposition of religion, namely, *that God exists.* The inquiry is carried out by critically examining (1) traditional philosophical attempts to prove or disprove the existence of God; (2) the view that religious utterances are nonsense; (3) the view that religion is simply morals with illustrative tales — tall and not so tall; (4) the view that belief in God is incompatible with science; (5) the view that men believe in God not because it is rational to do so but because they are insecure or prone to project ideal images of themselves; (6) the view that people are subtly coerced to believe in God by society since it has found religion to be an extremely effective means of controlling individual behavior. Readings from J. Hick, *The Existence of God;* W. James, *The Will to Believe;* B. Russell, *Why I Am Not a Christian;* S. Freud, *The Future of an Illusion.*

52–2 **Contemporary Philosophies of Man**
Four prepared class periods. Open to Upper Middlers and Seniors. The course consists of a critical examination of the views of man offered by contemporary existentialism, psychoanalysis, behaviorism, libertarianism, and anthropology. Some of the major questions to be asked are: What is the nature of man? What are his basic needs, rights, obligations, and values? What is the purpose of life? Is man innately aggressive? Is man free? Is he responsible for his actions? Given an understanding of man's nature how should we structure society to satisfy his needs and take advantage of his potentials. Readings: Frankl, *Man's Search for Meaning;* S. Freud, *The Future of an Illusion;* B. F. Skinner, *Walden II* and *Beyond Freedom and Dignity;* Ayn Rand, *Anthem;* K. Lorenz, *On Aggression.*

53–3 **The Great Philosophers**
Four prepared class periods. Open to Upper Middlers and Seniors. The great philosophers offer us a variety of sincere and systematic attempts to answer a set of very difficult questions which perennially face mankind: What is the good life? What is justice? What is knowledge? What is man? What is the relation between my mind and my body? Does God exist? This course critically evaluates the responses of Plato, Aristotle, Descartes, Hobbes, Berkeley, Hume, Kant and Mill to these questions in an attempt to show that both the questions and their answers continue to be relevant.

Physical Education

All new Juniors and new Lowers are required to elect one trimester of *P. E. 10* in addition to their regular athletic commitment.

10–1 **Physical Education**
10–2 Pass/Fail. Limit of fifteen students per section. Four morning class periods per
10–3 week. The program consists of four phases:
1. Track–a run, jump, throw, self-development program;
2. Ropes–elementary gymnastics and climbing;
3. Physical Fitness–an introduction to physical conditioning and weight training;
4. Drownproofing–a survival technique, swim course.

Two periods per week are spent on Drownproofing and two on the other three phases.

Psychology

The Psychology Department offers three term-contained courses as electives.

10–1 **Human Awareness**
10–2 Pass/Fail. For Juniors and Lowers. Limit of fifteen students per section. A course
10–3 in human awareness in which the students explore the relationship of their thoughts and feelings to their behavior with other people. Topics explored cover a wide variety of dilemmas encountered in all group experience including dilemmas of membership, isolation, communication, and leadership. These topics are related directly to the experience of living in a boarding school and to the feelings and frustrations that develop in making the personal choices and setting the personal boundaries that are a part of being an individual in a complex world.

30–1 **Human Relations**
30–2 Pass/Fail. For Uppers and Seniors. Limit of fifteen students per section. This is a
30–3 course in Social Psychology. Its topic for study is human behavior in small groups. It is concerned with answers to several questions that are of importance to most of us in making and maintaining contact with other people in social relationships.

How can I establish enough trust in myself and in others to make contact with these people? What power do I have in this group and how I can claim it? What level of closeness can I establish with others: what are my boundaries?

Human beings do most of their living, learning, working, and playing in small groups ranging from family to gangs to classroom. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goals. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness, identity and recognition, on the other. How these responses are balanced affects the success of groups and the relationships within them.

The classroom group provides students a laboratory in which to observe group process. They read some articles in the professional literature to provide them with hypotheses on which to hang their observations. They also write three papers on topics that reflect upon their own experience in the group.

31–1 **Human Sexuality**

31–2 Four prepared class periods. An interdisciplinary course for Uppers and Seniors designed to help students understand the facts of their own sexuality from the biological, social, and psychological points of view. The format of the course is a combination of reading, lecture, discussion, writing, and examination. In addition to the biological facts and current theories of psychological development, the topics to be covered include misconceptions and mythologies of sexual growth and development, important features of masculine and feminine psychology as they relate to sexual behavior, the relationships between attitudes and beliefs, and sexual conduct.

ience

The diploma requirement in Science is one year-long course in a laboratory science at the *20*-level or higher.

Juniors and Lower Middlers may pursue a three- or four-year sequence of science courses designed to provide an understanding of science and of scientific methods and thinking as part of a general education. The sequence also provides a sound foundation for later work in college; courses designated by the number *40* are more difficult than the regular ones, and admission is granted only to selected students. Some prepare for the Advanced Placement Examinations and consequently for advanced standing in college. *Science Honors* provides a two-year integrated course for those capable of advanced work in both Physics and Chemistry. Able students who have taken a regular course before their Senior year may prepare for the Advanced Placement Examinations by taking the *45* course for that subject. In addition, the *45* courses provide an opportunity for work to the student who plans further study in a particular field.

In general, students are encouraged to take a variety of courses and to acquire a broad background of knowledge in the different sciences rather than to specialize. For the student with special interests, individual projects are encouraged to the extent that they are consistent with safety, the equipment available, and the capacity of the student.

The *Science Courses 10-19* are open to Juniors and Lower Middlers. Able Juniors may elect courses at the *20*-level with permission of the Department Chairman.

Science

Science Science

10–0 Five periods, three prepared. A laboratory course in beginning physical science using an expanded version of a syllabus called "Introductory Physical Science." Students explore the nature of matter in its solid, liquid, and gaseous forms. Analyses of mixtures and compounds, and a study of radioactivity lead to an atomic concept of matter. Many experiments are quantitative and require careful recording of data, drawing of graphs, and calculations of results.

Science Preparation for the Physical Science

11–3 Pass/Fail. Four unprepared periods or two prepared periods per week. A course for Juniors or Lowers who are planning to take Chemistry or Physics the following year. Topics covered include the use of the slide rule, logarithms, exponential notation, significant figures, the metric system and dimensional analysis. There is laboratory work.

Science Earth Science

12–2 Four prepared class periods. This course teaches some of the methods of inquiry in earth science. Through color slides, topographic maps, geologic maps and aerial photographs, the student learns some of the elementary aspects of the earth's structure, stratigraphy, weathering, erosion, volcanism, and mineralogy. Some lab work is involved, emphasizing simple measurements and careful observations.

Science Astronomy "Earth, the measure of all things. . ."

13–3 This course surveys man's evolving views of the planets, the solar system, and the universe around him. Since the 1970's and 1980's can truly be called the years of planetary exploration, special emphasis is placed on the planets and how they compare to our own Earth. By 1990 scientists will have close-up pictures of all nine planets; this information promises to provide man with new problems for discussion and conjecture about the meaning of life on this planet. The course includes observing sessions at the P.A. Observatory, viewing numerous NASA films and traveling to the Science Museum in Boston.

Science History of Science

14–2 Four prepared class periods. An introductory survey of the history of scientific thought from the early Greeks to the present century. Biographies of a number of men such as Galileo, Newton, Pasteur, Thompson, Michelson, Rutherford, and others as time permits, are read and discussed in context with their work and their contribution to the development of science.

Science Oceanography

15–1
15–2 Four prepared class periods. The course deals with the biological, chemical, geological, and physical aspects of ocean environments.

Science Ecology (T2) (a two-term commitment)

16–12 Four prepared class periods. Open to Juniors and Lower Middlers. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and inter-relationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature.

Science Introduction to Physics
19–0 Four prepared class periods. Open to Juniors and Lower Middlers interested in an introductory course in physics which deals with the most fundamental topics of science from the smallest known particles to the known universe. The text material of *Harvard Project Physics* is the primary written source. There are no prerequisites for the course but it prepares students for *Physics 30* or *40*.

Science Physical Science
25–0 Four prepared periods and one unprepared period. Open to Lower Middlers and Upper Middlers (others by permission of the Chairman of the Chemistry Department). The course deals with the fundamental concepts of energy and matter, as they are viewed by modern chemists and physicists.

Biology

30–0 Biology
Three prepared periods and one double, unprepared laboratory period. The course stresses the unity of life, rather than the diversity, by emphasizing the function common to all living things. It covers, in plants, animals, and microorganisms the fundamental principles of metabolism, including nutrition, gas exchange, transport, excretion, and homeostasis; responsiveness and coordination; reproduction, genetics, and development; the principles and history of evolution; and the principles of ecology.

The laboratory work includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. It requires careful observation, mastery of techniques, and accurate recording of results. Several laboratory periods are set aside for field trips featuring ecology and conservation. There is opportunity for work on individual laboratory projects.

43–12 Biology (T2) (a two-term commitment)
Prerequisite: *Biology 30* or its equivalent. The basic philosophy behind this two term course is the idea that scientific knowledge, whether gained through instruction, reading, or experimentation, is essentially conditional and subject to constant modification as new information is acquired. This course is designed for students who have demonstrated an ability and interest in the science of biology and who have a strong desire to pursue their study in greater depth. Emphasis is placed upon the design and execution of experiments, the acquisition and interpretation of data, and the careful formulation of conclusions. Laboratory investigations, to a great extent designed by the class, include the nature of growth and development in plants and animals, and the interaction of individuals and populations.

44–1 Biology
44–2 Prerequisite: *Biology 30* or its equivalent. Advanced level topics dealing with physiology and comparative anatomy. This course involves dissections of selected representatives of the animal kingdom with emphasis placed on the structure and function of various organ systems.

45–23 Biology (T2) (a two-term commitment)
Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Four prepared class periods and one double, unprepared laboratory period. In addition to a review of basic biology, new material is presented as the course progresses. The combination of review and new work prepares students for the Advanced Placement Examination of the College Entrance Examination Board.

Chemistry

20–0 Chemistry
Prerequisite: Completion of *Mathematics 13* or the equivalent. For Lower

Middlers and Upper Middlers. Three prepared periods and one unprepared, double laboratory period. The course includes a systematic study of matter and the changes it undergoes. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Lahoratory work is closely related to topics covered in recitation.

30–0 Chemistry
Prerequisite: Completion of *Mathematics 26* or the equivalent. Three prepared periods and one unprepared, double lahoratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 20.* As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers.

42–2 Research in Chemistry
Prerequisite: *Chemistry 20* or *Chemistry 30* completed with distinction, and permission of the instructor. One prepared period and three unprepared, double laboratory periods, or the equivalent. Each student selects a research project in consultation with the instructor and then carries out the necessary work.

44–1 Chemistry
Prerequisite: Completion of *Chemistry 20* or the equivalent. Three prepared class periods and two unprepared, double laboratory periods. For students who wish to study chemistry further without trying to achieve advanced placement. This course is an introduction to stereochemistry, the study of the symmetry and shapes of organic and inorganic molecules.

45–23 Chemistry (T2) (a two-term commitment)
Prerequisite: *Chemistry 20* or *Chemistry 30* completed with distinction. Four prepared periods and one unprepared, double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Students interested enough in chemistry to take an advanced placement course should also plan their program to include physics.

48–0 Chemistry
Prerequisite: One year of Physics. Three prepared periods for recitation and two unprepared, double laboratory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Physics

25–0 Physics
Five class periods, one unprepared. Open to Lower Middlers, Upper Middlers, and Seniors. An introductory course in the basic concepts of physics with emphasis on relativity and modern physics. A somewhat less rigorous course than *Physics 30,* it is designed for students who have had only one year of algebra and one year of geometry. Text: *Mainstream of Physics* by Bieser.

30–1 Physics
Five class periods, one unprepared. Designed for students with demonstrated ability in mathematics and science. *Physics 30-1* is a prerequisite for *Physics 30-23* (T2). Text: *College Physics,* by Miller. A study of mechanics, primarily classical mechanics, in some depth.

30–23 Physics (T2) (a two-term commitment)
Prerequisite: *Physics 30-1.* Five class periods, one unprepared. Winter Term: Wave motions, heat, and kinetic molecular theory. A study of wave motions includes sound and geometric and physical optics. Spring Term: Electricity, magnetism, electronics, atomic and nuclear physics.

40–0 **Physics**
Four prepared class periods and one unprepared double, laboratory period. An advanced course open upon invitation of the department to a small group of students who are concurrently taking calculus and who have not previously studied elementary physics. A previous course in chemistry, though not required, is advisable. Lectures, recitations, and laboratory work are planned to prepare students for the Advanced Placement Examination in Physics of the College Entrance Examination Board.

45–12 **Physics (T2)** (a two-term commitment)
Five prepared class periods. Open to students who have completed a year of Physics and who have taken, or who are taking concurrently, a course in Calculus. The Fall Term course is essentially a course in modern physics. Part of the Winter Term is used in preparation for the Advanced Placement Examination. Some advanced laboratory work is done during the Fall Term.

50–3 **Relativity and Quantum Mechanics**
Prerequisites: *Physics 30* and *Math 52*. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course.

Special Science Courses

Animal Behavior 30–1, 30–2, 30–3 **Animal Behavior**
Prerequisite: one year of Biology. Limit of sixteen students. Preference given to seniors. Three prepared class periods and one unprepared double laboratory period. The course is designed to familiarize the student with the basic principles of animal behavior. The topics which receive the greatest emphasis are: territoriality, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Readings from *On Aggression, The Territorial Imperative,* and "Scientific American" reprints are included.

Astronomy 20–1 **Observational Astronomy**
Astronomy is one of the few sciences left that the amateur can enjoy while still making meaningful contributions to the field. This course exposes students to observing the heavens with the unaided eye, binoculars, and telescopes. Classes are scheduled in the Observatory three nights each week. Students identify constellations, track asteroids and planets, and learn how to observe using a telescope. Limit of 12 students.

Astronomy 25–2 **Planets, Stars and Galaxies**
This course is equivalent to a non-technical introductory college course in astronomy. Though a full spectrum of topics are discussed, special subjects of current interest are emphasized; these include constellation identification, the planet Mars, other solar systems, U.F.O.'s and life beyond the Earth. The P.A. telescopes are available for student use and classroom work is supplemented by numerous slide presentations and films. This course is open to anyone interested in general astronomy. Enrollment is limited.

Not open to students who have had *Science 13,* or to Juniors.

Astronomy 40–3 **Introductory College Astronomy—The Solar System**
Four prepared class periods. This course is equivalent to a one semester college astronomy course. The extent of man's knowledge about the solar system is studied and a fair amount of time is spent on modern astrophysics and analytic astronomy. Texts: *Exploration of the Universe* by George Abell, *Frontiers in Astronomy,* readings from "Scientific American." Prerequisites: One full year of Physics or permission of the instructor, and Algebra and Geometry. (Not offered in 1975-76).

Ecology **Introduction to Ecology**

31–1
31–2
31–3 Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Three prepared class periods and one double, unprepared laboratory period. Early emphasis is on the concepts of the ecosystem, energy flow, material cycling, succession, and relations within and between populations. These fundamentals are then applied to problems of human ecology such as overpopulation and air and water pollution. In the laboratory, relationships in communities are investigated. Various pollutants and their effects upon the environment are also tested with the help of computer simulations.

Geology **Geology**

34–3 Three prepared class periods and one double, unprepared laboratory period. The course prepares students to interpret natural environments and to evaluate the physical and chemical processes acting in our own. Field trips to local sites. Prerequisites: successful completion of or current enrollment in a *30*-level mathematics course and a laboratory course in science.

Science Honors **Science Honors**

30–0
40–0 Five prepared class periods or the equivalent. A two-year sequence, open, upon invitation of the instructor, to a small group of Upper Middlers who will complete a year of analytic geometry and the calculus before graduation and who show promise of unusual capacity in science and mathematics. The subject matter includes chemistry and physics, both of them carried well beyond the elementary level in text and laboratory work. It is expected that the ablest students in the sequence will be prepared for both the Physics and Chemistry Advanced Placement Examinations of the College Entrance Examination Board.

Science Honors 30 fills the diploma requirement in laboratory science for students who find it inadvisable for any reason to continue to *Science Honors 40.*

Andover

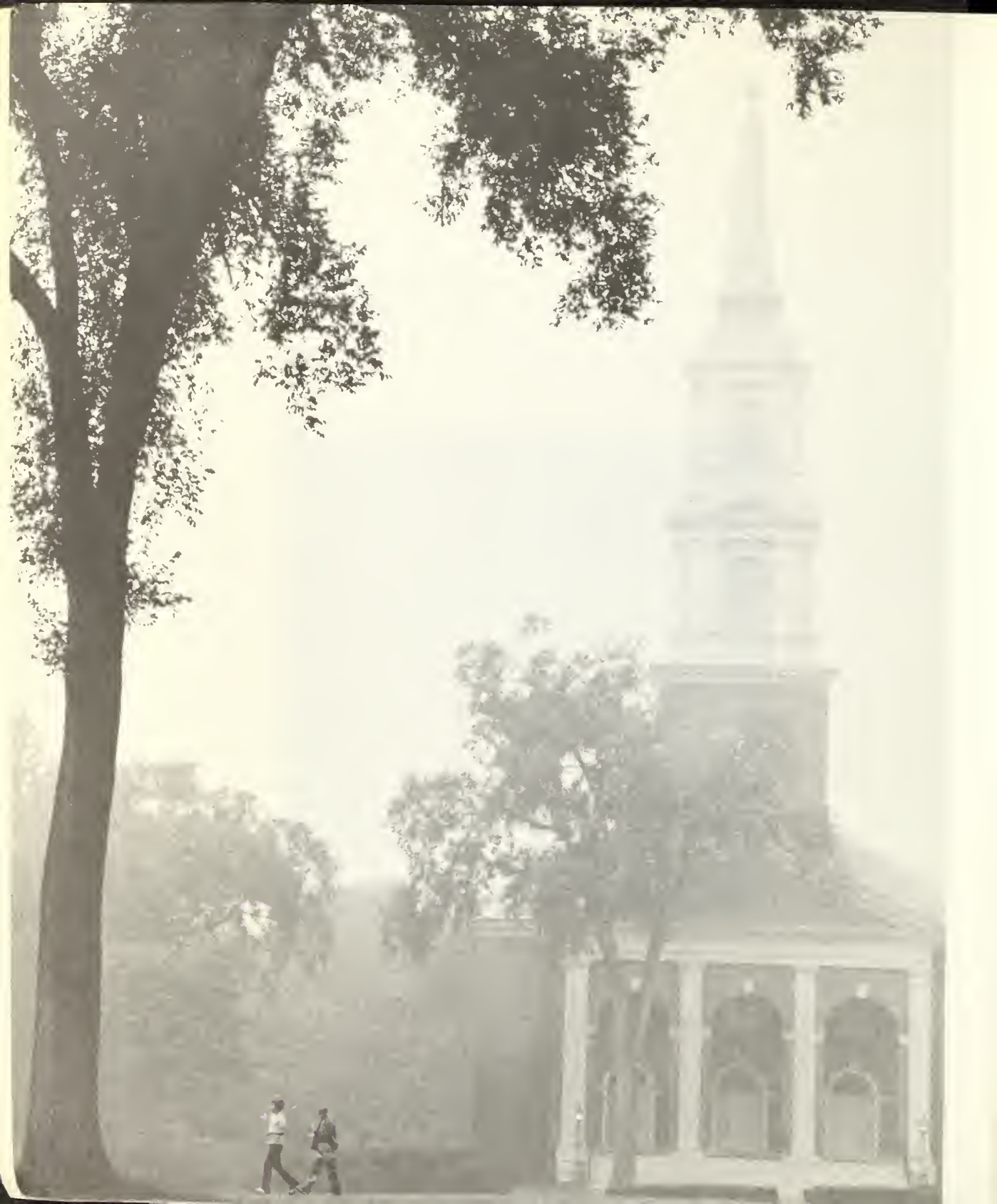


Andover

Catalog 1976-77



Published by
Phillips Academy
Andover, Massachusetts



Contents

7 INTRODUCTION TO ANDOVER
17 ANDOVER LIFE
27 THE ACADEMIC DEPARTMENTS
28 The Arts
32 Classics
32 Greek
32 Latin
33 English
34 History and Social Science
36 Mathematics
37 Modern and Foreign Languages
37 French
38 German
39 Russian
39 Spanish
40 Religion and Philosophy
40 Science
40 Archaeology
40 Biology
42 Chemistry
42 Physics
43 Psychology
45 COMPLEMENTARY PROGRAMS
45 Complementary Schools Project
45 The Andover Summer Session
45 The Short Term Institutes
46 School Year Abroad
46 Other complementary programs
47 ATHLETICS
49 HEALTH CARE
50 TUITION AND EXPENSES
51 FINANCIAL AID
52 ADMISSIONS
53 The four steps for application
53 Secondary School Admissions Test
53 Senior Class Candidate
54 Whom to contact at Andover
54 Early decision
54 ALUMNI REPRESENTATIVES
54 Admission interview schedule
63 TRUSTEES
64 ADMINISTRATION AND FACULTY—1975-1976
73 STATISTICAL INFORMATION
73 Geographical distribution
74 College Admissions
75 College matriculations for the Class of 1975
76 MAPS
76 Campus map
78 Regional map
79 INDEX
81 PRELIMINARY APPLICATION FORM

Calendar 1976-77

Fall Term

September 18, Sat	New students arrive
September 20, Mon	Old students arrive
September 23, Thurs	Classes begin
November 13, Sat	Andover-Exeter football
November 25, Thurs	Thanksgiving Day—no classes
December 3, Fri	Classes end for Fall Term
December 7, Tues	Exams begin
December 10, Fri	Exams end—vacation begins

Winter Term

January 3, Mon	Students return by 8:00 p.m.
January 4, Tues	Classes begin
March 8, Tues	Classes end
March 9, Wed	Exams begin
March 12, Sat	Exams end—vacation begins

Spring Term

March 28, Mon	Students return by 8:00 p.m.
March 29, Tues	Classes begin
May 30, Mon	Memorial Day—no classes
June 2, Thurs	Classes end
June 3, Fri	Exams begin
June 8, Wed	Exams end
June 9, Thurs	Commencement



By American standards Phillips Academy—colloquially referred to as "Andover" in our day—is an ancient school, but the purposes for which it was founded during the American Revolution make as much sense now as they did almost two hundred years ago. We believe in rationality with no less confidence than did our eighteenth century forebears, and we feel that any school which helps students joyfully to use their minds has an important place in American education. "Using one's mind" need not be a dry-as-dust thing: clear thinking opens one's eyes to all manners and kinds of living.

Many label schools such as Andover "preparatory" schools. This is only partly true. While we do "prepare" individuals to enter college, and life beyond, we are also concerned with an individual's life here and now, in the kind of person that individual is, in her or his decency, happiness and character.

No educational institution ever stands still. Andover, like all schools, is in constant movement and change, endeavoring to accommodate rationally to a culture which itself is perpetually in movement. The lively and demanding task for this community, students and faculty, is to make these accommodations wise and constructive.

THEODORE R. SIZER









Introduction to Andover

Phillips Academy, usually called Andover, is a residential high school known for academic excellence and for the diversity of its students. Founded in 1778, Andover is the oldest incorporated boarding school in the nation: independent, coeducational, integrated and non-sectarian.

Andover's Constitution, which has guided the Academy for two hundred years, commits it to "be ever equally open to Youth of requisite qualifications from every quarter." For two centuries Andover has sought to develop sound scholarship, character and self-reliance in its students, as well as a commitment to work for the good of the nation and mankind.

Youth From Every Quarter

Phillips Academy enrolls boys and girls from every economic and social stratum, from every area in the United States and more than 30 foreign countries. Two things that Andover students have in common are intelligence and the willingness to use it.

Such diversity is unique to a school that is large, financially stable and residential. Headmaster Theodore R. Sizer maintains the Academy's commitment to the quality of diversity: "Young people learn from peers as much as from teachers . . . thus the ability, decency and dedication of each student is critical for every other one . . . enrolling students from varied backgrounds enriches education and undermines the divisions that rend national and international life."

FINANCIAL AID

Nearly half of each student's educational cost is paid by income from the school's $57,000,000 endowment, a product of the generosity of past Andover graduates, parents and friends. Above and beyond that, Andover has budgeted nearly a million dollars in student financial aid for 1976-1977—a total of $925,000. Direct financial aid grants account for $840,000; $85,000 is available

"For the most part teachers are open, friendly and able to relax casually with students—even eat meals with students!!"
George Kirchway '75



from the revolving student loan fund. Approximately 350 students will receive financial aid. Andover does not intend to let inflation squeeze out the lower or the middle income sector of the public from the opportunity for independent residential education.

SCHOOL SIZE

The students total 1114 (737 boys and 377 girls) and the faculty number 150, 18 with Ph.D.'s and 90 with M.A.'s. An uncommon depth and variety in educational program is possible in a school of this size. Andover operates on a trimester system, offering 285 separate courses that vary in length from one trimester to the full year. The average class size is 14. Boys and girls are also involved in the full complement of varsity and JV sports, dramatic productions, vocal and instrumental musical groups, the school newspaper, radio station, literary magazine and many other student-run activities and clubs campus wide.

RESIDENTIAL LIFE

Andover's Cluster system provides the intimacy of a small community within the context of the many classroom and activity offerings of a large school. A student belongs to and lives in one of six clusters, or neighborhood groupings, of dormitories, headed by a Cluster Dean as administrator and 15-20 faculty members who are dormitory counselors or advisors. With its own student



officers, discipline system, intramural athletics and informal social activities, the cluster serves as the student's home base and fosters close relationships with faculty members as well as with other students. Each of Andover's six clusters includes boys' dorms and girls' dorms and approximately 175 students. Large dormitories are likely to have Seniors, Uppers, Lowers and Juniors—our perhaps confusing but nearly 200-year-old terms for 12th, 11th, 10th and 9th grade Andover students.

FACULTY

Insistence on sound academic teaching, hard work and the mastery of intellectual discipline and skills are tenets of the Andover faculty. The classroom comes first, but an Andover instructor combines teaching with the role of dormitory counselor, coach and friend. Andover teachers are accessible to students in the dormitory, in athletic endeavors, in extracurricular activities, at meals and in the evenings. The essence of residential schooling is total immersion. Faculty members also are active in school policy-making and many are published authors and editors.

HISTORY

Samuel Phillips, Jr., a Revolutionary War patriot and later Lt. Governor of Massachusetts, founded Phillips Academy in 1778, when he was 26 years old. Securing financial aid from his father and uncle, young Phillips wrote the Academy's Constitu-

tion to establish a "public free School or Academy" to teach "English and Latin Grammar, Writing, Arithmetic and those Sciences wherein they are commonly taught, but more especially to learn them the GREAT END AND REAL BUSINESS OF LIVING."

The Academy opened for instruction April 30th, 1778, in a building formerly used as a carpenter's shop. From the beginning, under the leadership of Eliphalet Pearson, the first Principal, the school gained in reputation, attendance and number of teachers. Early Principals John Adams (a relative of both Presidents) and Samuel H. Taylor preserved the desired atmosphere of calvinist orthodoxy: dancing, Shakespeare and the reading of novels were strictly forbidden.

The modern period of the school's history commenced in 1873 with the election of Cecil F. P. Bancroft, a man of foresight, vision, patience and shrewd discrimination, who was principal until his death in 1901. Dr. Bancroft was responsible for the construction of Andover's first dormitories (prior to his time, students had lived in rooming houses) and for the transformation of the faculty from a small group of assistants, subservient to the headmaster, to a larger group of independent scholar-teachers.

Under Dr. Alfred E. Stearns (1903-1933) the Academy acquired more land, buildings and resources and the modern Andover campus took shape. During the headmasterships of Dr. Claude M. Fuess (1933-1948) and John M. Kemper (1948-1971) the student body, the faculty, the physical plant and the endowment continued to grow. At the same time advances in educational practice and theory at Andover made the Academy a leader in secondary school education.

The present Headmaster, Theodore R. Sizer, formerly Dean of the Harvard Graduate School of Education, assumed his duties on July 1, 1972. In October of 1972 the Trustees of the school announced the incorporation of Abbot Academy into Phillips Academy to effect a single coeducational school. Several years of coordination of academic courses and extra-curricular activities had preceded the merger. The combined facilities of Andover and Abbot now include almost 200 buildings on over 400 acres.









"Students develop a great academic foundation at Andover, but for me the most significant part of the school was that Andover offered the opportunity to learn to live and make friends with people of diverse backgrounds, as well as how to live on your own and depend on yourself."

Bill Boeschenstein '73









"Andover is a complete school. It is big enough so one can meet many different types of people, but small enough so one doesn't feel lost. For the years you attend the school it is your life. Here, you meet your true friends and have some of the best times of your lives. Diversity is perhaps the best element of the school. There are countless things to do if you look."

Mark Forsyth '75




ANDOVER

Andover Life

Andover is a large and active place which constantly generates the feeling that "things are happening." Course work is fast-paced and involves about twenty-five hours of outside preparation each week. In addition there are approximately six hours of athletics and, for Uppers and Lowers, three hours of the school work program per week. Most students also become much involved in extra-curricular activities and social events. Decisions about the use of one's time are largely left to the judgment of the individual, for the school encourages independence and personal responsibility. There are no study halls, and students may use their free time as they wish.

Andover is a 45-minute drive from Boston and Cambridge, and buses run hourly between Andover and downtown Boston. Students have easy access to the historical, cultural and entertainment offerings in the Greater Boston area, and to Logan Airport for vacation flights home. Frequent trips are scheduled to the Boston Symphony, other concerts, movies, plays and sports events. Most students are eligible to take a day excuse each week; after the first two weeks of the school year overnight excuses are permitted. After these first two weeks of the year, there are no classes on alternate Saturdays, allowing students taking weekends to leave after their last appointment on Friday. On other weekends students are expected to begin overnight excuses after their last Saturday appointment.

THE SCHOOL DAY

On Monday, Tuesday, Thursday and Friday there are five morning classes of 50 minutes and another two in the late afternoon. On Wednesdays and on those Saturdays when there are classes, classes meet only in the morning, the Wednesday classes being reduced to 40 minutes in length. Laboratory courses usually encompass two full periods. An individual is likely to have

one morning period and one afternoon period free each day, though the number and time of free periods depend on the scheduling of courses and laboratories.

Athletics or an afternoon activity usually takes place after lunch until about 3:30 on Monday, Tuesday, Thursday and Friday. On Wednesday and Saturday varsity and junior varsity teams often have outside competitions. After dinner there is time for extra-curricular activities, double period studio art classes and recreation. At 8:00 all underclassmen must be back in their dormitories or in the library, language lab, computer room, or audio-visual center, to return by 10:00 p.m. Seniors need not be back until 11:00.

Wednesdays and Saturdays are half holidays with no afternoon appointments. On alternate Saturdays there are no morning classes. Sunday is totally free. On these days there is time for independent study, for special projects, informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Movies, dances, concerts, plays and other social events take place Saturday evenings. Social events during the week are limited by the demands of the academic program, but the weekends on campus abound with dances, concerts, movies, plays and informal activities.

Meals are served in Commons, the central dining hall composed of four dining rooms and two serving areas, and in a separate dining hall serving the Abbot Cluster. During the week breakfast is served from 7:15 to 8:15, lunch from 12:30 to 1:15 and dinner from 5:30 to 6:15; on Sunday the first two meals are served somewhat later. While meals are not required and there is a snack bar on the campus, most students find it convenient and economical to eat regularly at one of these dining halls.

THE CLUSTERS

The dormitories and houses in which boarding students at Andover live are grouped into six units called "clusters" which serve as administrative and social subdivisions of the school. The cluster system is the heart of Andover's living arrangements. The purpose of the cluster is to create the personal atmosphere of a small community in which everyone knows everyone else and people do things together. It brings the advantages of a small school to an institution that already has the advantages of size. The clusters, each of about 175 students from all classes, have considerable independence. Teachers and students together manage their own affairs under the leadership of the Cluster Dean. The clusters are the focus of a variety of activities such as

lectures, seminars, off-campus service projects, social events and intramural athletics.

Dormitory life is for many students one of the most valuable aspects of their time at Andover. Dormitories and the smaller houses contain the apartments of house counselors and their families and although these buildings are somewhat varied in size, all are small enough to encourage close relationships among students and between student and house counselor. The person who lives in the next room may well come from a very different background or part of the world. Students generally remain in the same cluster during their years at Andover and form continuing relationships with the faculty and other students there.





"There is a constant learning experience going on just by living at P.A., away from home and among such individualistic people."
Diana Van Anda '75



ACTIVITIES

Other important aspects of education at Andover are extra-curricular activities. Some are course-related, such as the Astronomy Club, the Asian Cultural Society, the Latin Play and foreign language clubs of all kinds. Many are not; these include the various school publications, the political organizations and the radio station. The Academy's Afro-Latino-American Society, with its own meeting room, is a cultural support to black and Spanish-speaking students. Af-Lat-Am sponsors a news journal, theater performances, speakers, seminars and trips to Boston, 45 minutes away by bus. Other active groups are the Pre-Med Club, the Student-Alumni Association, the Chess Club, the Coin Club, the Stamp Club, the Sailing Club, Philomathean (the debating society) and an Eagle Scout Explorer's Post whose purpose is to practice skills learned in scouting and enable other Boy Scouts to continue their scouting experience. Members of the Andover Tutorial Program are students who give tutorial help to fellow students who are having academic problems, mainly in math, science and foreign languages.

Andover also believes in the importance of off-campus experiences that give students a change of pace, contribute to their awareness of social problems and invite them to meet the needs of individuals and groups outside the school. The Community Service Program arranges placement in area

hospitals, city or suburban elementary schools, youth centers, a school for emotionally disturbed children and other agencies. Students participate in their own free time, as an activity in lieu of athletics or as an independent study project. One student may tutor an hour a week in a nearby elementary school; another may spend four hours every weekend in a Lawrence hospital or work with retarded and severely handicapped youngsters at a regional state school. Another boy or girl may be intensely involved in a bilingual classroom in Lawrence or with an emotionally disturbed child at St. Ann's Home. Over one hundred students were involved in community service during 1975-76. The Solid Waste Action Group collects newspapers, magazines, cans and glass for recycling.

Upperclassmen may elect for one term to be involved in the Activities Program instead of the usual afternoon athletic activities. Some popular choices have been ceramics, music, photography and woodworking. Other groups of students have worked as a stage crew or explored the dynamics of "decision making."

COUNSELING AND DISCIPLINE

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has, or they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that freedom for the individual can be achieved only within a social order. The school tries to keep rules to a minimum.

Each student has a faculty counselor or houseparent who lives with his or her family in the dormitory and who is available for advice and assistance. Parents can expect to hear from the house counselor at regular intervals, as this faculty member works closely with students in the dormitory on both the personal and academic level. Parents are encouraged to turn to the house counselor for information regarding a student's progress.

Each Cluster Dean supplements the work of the house counselor and is available to students and parents for information and counsel. The academic advisors help students in the cluster plan their academic programs. Full-time Co-Directors of College Placement and their staff assist all Seniors with their future plans.

Discipline is handled at the cluster level and involves the Cluster Dean, house counselor, other faculty and student

representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of the school community and continued infractions that indicate an unwillingness to come to terms with the demands of the school all render a student liable to dismissal. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds.

Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission. Boys and girls who feel they could not live happily with these rules should not apply for admission.

THE WORK PROGRAM

The work program, in which every Lower and Upper takes part, is designed to develop a sense of community responsibility for the daily operation of the school. It assists the school in reducing its expenses and makes it possible to lower student fees. Lowers, working no more than 3 periods per week, share the jobs of returning books to library stacks, operating audio-visual equipment, serving as office helpers, messengers, and laboratory





assistants, and performing other essential tasks. Upper boarding students are responsible for the daily care of dormitories while all students in any given dormitory are responsible for keeping its entries free of litter and snow. Upper day students serve two periods a week in work crews raking leaves, sweeping stairways in classroom buildings, and other similar tasks.

The Clusters take turns each week working in the dining hall, Seniors serving as overseers. Seniors have other supervisory roles: proctoring in dormitories and, as members of Blue Key, organizing the welcome and orientation of new students in the fall.

RELIGIOUS SERVICES, PROGRAMS AND ACTIVITIES

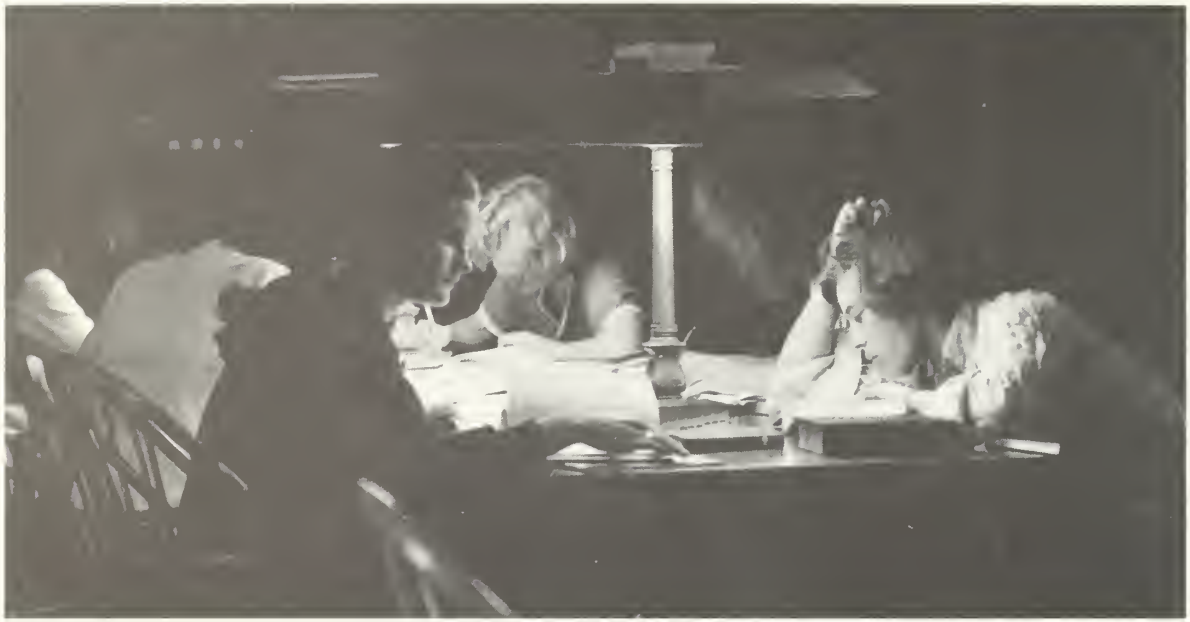
Andover is committed to developing an interfaith team ministry at the Academy that will help to provide leadership and support for various religious programs and activities in a pluralistic community. This new departure, which promises to be a creative development, will be implemented in coming months. At the moment, a number of programs and activities go forward under the general purview of the acting School Minister and the Chapel Council, an organization of students who wish to exercise leadership in this area.

Worship services at Andover are available for all who wish to participate. An interdenominational Christian service is conducted at least weekly, usually on Sunday morning. A Roman Catholic Mass is celebrated at 10 o'clock on Sunday mornings. The student Jewish congregation has services regularly on Friday evenings.

Jewish activities are planned, coordinated and promoted under the leadership of a student Jewish Activities Board. In addition to regular and special services and holiday observance, all students who are interested may help with a drive for the Israel Emergency Fund; the Board also plans occasional Sunday breakfasts and other programs.

The Newman Club is the campus organization of the Roman Catholic community. The club oversees the program of Masses presently celebrated by a priest from Merrimack College on Sundays and Holy Days, and also may occasionally sponsor a seminar or discussion or a breakfast.

A Fellowship of Christians meets regularly for discussion, study and prayer. The Fellowship not only carries on its own program at Andover but also maintains contact with other groups elsewhere through joint meetings and conferences.



THE LIBRARY

At the center of Andover's intellectual life is the 100,000 volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually. The Copley Wing is used for reserved books and provides carrels for individual studying.

The Library subscribes to over 250 American and foreign periodicals and 11 daily papers from cities throughout the country. A microfilm file of The New York Times is available. Particular Library treasures are an original elephant folio of *Audubon's Birds of America* and the papers and books of Oliver Wendell Holmes. The science and mathematics departments have working libraries in their own buildings.

THE ADDISON GALLERY

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the whole community. In addition to organizing exhibits of American art from its own collection, the museum originates exhibits of contemporary painting, sculpture, photography and crafts. A student-produced seminar series brings artists into close range contact with students concerned with issues of use and survival in the

arena of contemporary art. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

AGTV, a new educational component of the museum's program explores the use of videotape in a special Art Therapy Project for people with special needs from the Greater Lawrence community. Phillips Academy students are involved as volunteer staff members in this art-based community service project.

Established in 1931, the holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.





The Academic Departments

"Andover should vigorously recruit an international student body, boys and girls, of social, racial, national, and religious diversity."

T. R. Sizer

Curriculum

The curriculum combines a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual. Student placement may be independent of age or grade. Students are encouraged to progress at a rate appropriate to their ability and ambition, and through advanced placement at entrance or accelerated courses, many students are able to fulfill requirements ahead of the normal year, enabling them to take college-level courses or other electives.

Andover operates on a trimester system which provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects. Classroom groups are small enough to permit individual attention. Following each department is a list of their courses. The curriculum is described in detail in the *Course of Study*, which will be sent to each preliminary applicant and to others who request it. With the approval of Academic Advisors and house counselors, students may select their instructors, class times and sections during Arena Day which precedes each trimester. However, the school cannot guarantee that all students will be able to have all their desired selections.

THE ARTS

Visual Arts

The Arts and Communications Center never seems to shut down. Of course there are many studio classes morning and afternoon, and the audio-visual facilities are used day and night, but in addition to art students, there are bottle-cutters, hi-fi cabinet makers, rabbit-hutch designers, and other crafts-conscious young people working many evenings. The Art Department welcomes these activities as well as those related to courses, and faculty members are on hand every evening to encourage the idea that whether it's sculpture or bicycle repair, the Arts Center is the place to go.

In recent years art facilities have expanded to the former Abbot campus to include painting, print-making, and ceramics. The number of students interested in the visual arts has increased enormously over the last decade, and the projects undertaken have varied from traditional media to toys, small kinetic sculptures that crawl around the room, puppet-making, rear-projection events, and documentary video. Two years ago the architecture class designed and built a playground for a local elementary school. The year before it built an experimental climbing tower for the Search and Rescue group. Superb facilities—fully-equipped wood and metal shops, two complete darkrooms, print-making equipment, several painting and drawing studios—enable students to carry out such projects. The kinetics studio is a maze of wires, gears, and motors. Ceramicists have the use of several kilns: electric, gas-reduction, wet-firing, and a recently completed salt kiln.

Andover attempts to balance highly structured, problem-solving courses like the basic Visual Studies, with the more adventuresome advanced courses, many of which are organized around longer-term projects. For a student who desires several terms of basic training in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong component in a traditional area of general education. At the heart of the program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

Evidence of the strength of our students' work can be seen in *Eidolons*, the school's magazine of photographic communication, *The Mirror*, the literary magazine which includes graphics as well, and occasional pieces in *The Andover Review*, Phillips Academy's new publication on secondary education.

The discipline and variety of Andover's art program has found exposure in recent years at the Ralph Bradley Arts Festival, in which students from twelve schools congregate for a weekend to exhibit art work, perform musical and dramatic pieces, and share ideas with visiting critics. Any student with an interest in the visual arts should find at Andover the opportunity both to strengthen his understanding of the basics and to broaden his experience in a variety of media and concepts.

Photography

At any given moment over one-third of Andover's student body is involved in photography courses. Five photography instructors are on the staff and six still photography courses are offered, ranging from Introductory Photography to Documentary Photography and Studio Photography. Many of the photographs in this catalog were taken by students.

Filmmaking

Filmmaking and videotaping are important activities at Andover. In the two sections of Filmmaking, individual students make movies: sketches of a roommate, short documentaries, personal fantasies. There are also longer, more elaborate story movies, sometimes requiring an entire class to handle the technical difficulties of sound, lighting and acting. And there are projects, done primarily on videotape, which help other people in the community: studies of a dancer practicing, of a teacher doing an experiment, of an athlete working on his technique in the hurdles.

Theatre

Courses in theatrical production, a series of term-contained courses in directing, acting, stage lighting and design, and a yearlong major, Plays in Production, in which students become involved with all areas of production on the amateur stage, are very popular. The courses combine classroom and workshop sessions, students working out practical theatrical problems together under the guidance of the instructor. At Andover it's a rare week that doesn't see two or three plays in production, many of them written, directed or produced by students. Students may do theatrical work as an extra-curricular activity; or they may join one or more of the theatre courses in directing, scene design and stage lighting, acting and production.

The main stage in George Washington Hall plays to audiences of over one thousand. It is a flexible, professionally equipped proscenium stage recently remodeled and modernized, whose dramatic and technical possibilities are vast: it is complete with a full fly system, accommodation for innumerable lighting instruments and an elevator/pit. The versatility of the main stage has encouraged many demanding productions; among recent performances are *Rosencrantz and Guildenstern Are Dead, Richard III, Antigone, The Madwoman of Chaillot, A Man for All Seasons, Guys and Dolls, Kiss Me Kate, A Cry of Players,* and *My Fair Lady.*



The Drama Lab, where some of the most exciting and innovative work goes on, is an intricate arena/workshop theatre with excellent lighting facilities, suitable for audiences of less than 100. The major main stage plays are usually directed by a member of the faculty. The Drama Lab provides opportunity for students to direct plays themselves and to experiment with dramatic styles. The Drama Lab will take nearly any shape the imagination of the director and cast can conjure up. Here some twenty or more plays can be produced each year, representing a range of theatrical types and styles. A sample from the past few years includes *Lysistrata, The Glass Menagerie, Everyman, America Hurrah, The Homecoming, The American Dream, The Three-Penny Opera* and *No Exit.* The school has other

potential acting areas, indoors and out, including the steps of Samuel Phillips Hall and the green lawns of the campus which are often used by imaginative directors.

For several years, the Andover Touring Company (auditions are open to all students) has traveled to Manchester, England, and other British schools, to perform *Our Town, Harvey, The Fantasticks* and, in 1976, *Scenes from an American Life*. In exchange, the Manchester Grammar School has visited Andover, bringing superb productions of such plays as *Twelfth Night, A Servant of Two Masters*, and *The Recruiting Officer*.

Music

Graves Hall, a huge old three-storied Victorian brick building complete with turrets, heraldry, love seats and waste space, is one of the oldest classroom buildings on the campus. It has two large rehearsal halls, one for the Concert Band and one for the String Orchestra, and many individual practice and ensemble rooms, each containing a practice piano, one music classroom and three teaching studios; it also houses the finest musical instruments and stereo equipment. We are currently developing an electronic music studio. The Music Department has a large and up-to-date record lending library and listening room. A short distance away is Cochran Chapel, where the Chorus has a fully equipped rehearsal room with a library of music literature.

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, woodwinds and percussion.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He may also, for a nominal fee, study privately.

The Nature of Music, or Music 20, is presently the diploma requirement in music, and a prerequisite for most courses in the history and appreciation and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

For beginners and advanced organ students Andover makes three instruments available. In the main sanctuary of the chapel is the Casavant Organ. The chorus rehearsal room has a practice pipe organ, and the Sylvia Kemper Memorial Chapel has a reed organ.

For the student who is sufficiently advanced, Andover has many musical organizations in which to play or sing, either on a credit or a non-credit basis. Small ensembles of strings, woodwinds, brass and madrigal singers, as well as a large jazz band made up of players from the Band and Orchestra, rehearse and perform many times during the year. The Fidelio Society is made up of outstanding singers from the Chorus. The Chamber Music Society plays for its own enjoyment and also gives school recitals. The Orchestra plays often in concert and appears with the Chorus several times a year as accompanist. In the spring as a pit orchestra it accompanies the annual Broadway musical. The Jazz Band is open to any qualified instrumentalist or vocalist and plays all styles of music written for stage band. The Pep Band plays for football games, and the Concert Band gives formal concerts at Andover and neighboring schools.

One of the focal points on the campus is Memorial Tower in which is housed a carillon of thirty-seven bells. This instrument is played not only by the Academy Carillonneur but also by the student who wins the Fuller Music Prize, an award of $350 a year. Duties of the prize winner consist of playing the carillon a number of times each week and on special occasions. In the Music Building there is a duplicate carillon practice keyboard. Lessons may be arranged with the Academy Carillonneur.

Andover students have many opportunities to attend musical performances either at the school or in the city: the Boston Symphony Orchestra, the Metropolitan Opera on tour, classical concerts, jazz workshops and rock concerts. Faculty members regularly present chamber music recitals on Sunday afternoons throughout the year.

ART

10-Visual Studies
11-Introductory Ceramics
12-Introductory Photography
13-Art Studio
20-Drawing
21-Animation
22-Television Videotape
23-Two-Dimensional Design
24-Three-Dimensional Design
25-Intermediate Ceramics
26-Intermediate Photography
300-Graphics and Photography
301-Studio Photography
302-Painting
303-Filmmaking
304-Advanced Ceramics
305-Print Shop
306-Advanced Photography
307-Documentary Photography
308-Sculpture
309-Kinetics
310-Architecture
311-Contemporary Communications

ART HISTORY

27-Problems in Art History
54-Art and Architecture in Antiquity and the Middle Ages
55-Art and Architecture in the Renaissance and Baroque
56-Art and Architecture since the French Revolution
57-American Art Reveals American Life

PERFORMING ARTS

20-Introduction to Theatre
21-Introduction to Acting
22-Public Speaking
23-Acting Workshop
24-Scene Study
25-Directing Workshop
26-Stagecraft
27-Play Production
28-Shakespearean Workshop
29-Playwriting
30-Introduction to Dance

MUSIC

10-Beginning Instruments
11-Recorder Ensemble
12-Brass Ensemble
13-Woodwind Ensemble
14-String Ensemble
15-Fidelio Society
16-Band
17-Chorus
18-Chamber Orchestra
19-Private Instrumental and Vocal Lessons
20-The Nature of Music
22-Medieval and Renaissance Music (to 1600)
23-Baroque Music (1600-1750)
24-Classical Music (1750-1820)
25-Romantic Music (1820-1900)
26-Twentieth Century Music (1900-present)
27-Independent Study in the History and Literature of Music
28-Jazz
29-Music of America
30-Music of Africa and the Mid-East
31-Seminar on Eastern Music
32-Orchestration and Conducting
33-Theory of Music I
34-Theory of Music II
35-Theory of Music III
36-Electronic Music
40-Advanced Techniques in Electronic Music



CLASSICS

The study of Greek and Latin challenges students to examine evidence and to develop powers of independent thought and the awareness that the social, political and economic problems that confront us today have appeared many times in human history. Through the study of classical languages, students establish a firm basis for humanistic studies in their own language and literature. By reading ancient authors they may learn what constitutes a "classic" and what the classics mean today.

Each year students produce a Roman comedy. These have usually been plays by Plautus, and in recent years have included *Captivi* (The Prisoners), *Mostellaria* (The Haunted House), *Menaechmi* (The Two Brothers), *Curculio* (The Parasite), *Pseudolus* (The Crafty Slave), and *Rudens* (The Rope). Andover students have also produced two tragedies in Greek, Aeschylus' *Oresteia* and Sophocles' *Ajax*.



Latin for centuries depended more on the spoken than the written word, and oral tradition is celebrated at Andover in an annual Latin declamation contest. For students interested in knowing how Latin developed and changed, an informal course may be offered in the study of Italian through Latin. Mature students are encouraged to undertake independent projects of their own choosing on a tutorial basis. Greek dinners bring together students who are at different levels of study in the Classics.

Ever since its founding Andover has had a long line of distinguished teachers of classical languages. In recent years members of the Classics Department have published textbooks, both in Latin and Greek, for use in secondary schools. Latin and Greek classes at Andover are held in Pearson Hall, one of the oldest buildings on campus. Designed by Charles Bulfinch, it was dedicated in 1818 as part of the Andover Theological Seminary and since 1908 has belonged to Phillips Academy.

GREEK
10-Greek
10-20-Greek
13-Introduction to Greek
20-Greek
30-Greek
40-Greek

LATIN
10-Latin
10-20-Latin
11-Latin
13-Introduction to Latin
15-Latin
20-Latin
21-Latin
30-Latin
31-Latin
40-Latin
50-Latin

CLASSICS
11-Etymology
21-Classical Civilization: Greece
22-Classical Civilization: Rome
30-Epic Poetry
31-Etymology

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. A student must prove himself competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, his opportunities multiply. He may enroll in any of the Literature Sequence courses that he has not yet taken; he may study any of the more than twenty-five advanced or specialized courses offered by the Department; if he is a Senior, he may qualify for an independent project supervised by the teacher of his choice.

The Department also serves the needs of less advanced students. Tutorials are offered for training in the fundamentals of language. For foreign students, a specialist teaches English as a Second Language. The normal course for Juniors (ninth-graders) is English 10, designed to teach the students mastery of the sentence and the paragraph, a sensitivity to literature, and an awareness of the challenge of articulate communication.

The walls that used to separate academic departments are crumbling. Many courses in the Performing Arts, most notably in Theater, are taught by members of the English Department. Most of the Interdisciplinary Courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the Foreign Language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either passed the Competence Course in the basic skills of writing and reading or has proved himself competent on the departmental examinations.

Throughout the year the English Department sponsors trips to theaters in Boston and Cambridge, and several times each term brings writers and scholars to the campus to meet with students and faculty. Recent visitors have included Robert Penn Warren, Eleanor Clark, Anne Sexton and Professors Louis Coxe and Leo Marx. Students are further encouraged to exercise their analytical, oratorical and creative talents by competing in the Department's ten different prize competitions.

Many extra-curricular activities are related to the study of English. A strong and wholly uncensored weekly newspaper, *The Phillipian*, offers many opportunities for journalistic writing, photography, and business management. Though the school literary magazine, *The Mirror*, is basically a magazine of poetry and fiction, it also publishes graphics and photographs when it comes out three times a year.

The staff of the *Pot Pouri*, the school yearbook, describes its publication as "the chief permanent record to which alumni turn for an account of their years at Andover." It represents a long-accepted tradition: the poignant documentation of the events of the school year. The staff, however, does not restrict itself to an objective viewpoint. It tries to create a yearbook which reflects the changing moods and emotions of the Senior class during its final year at Andover.

WPAA-FM is a student-run educational FM station licensed by the FCC. It has superb equipment for a station its size and provides 58 hours per week of news, music, sports and educational programs to an area with a population of about 200,000. It is a member of the National Public Radio Network; its studio and transmission facilities are located in Evans Hall.

A term-contained course in public speaking, available all three terms, is an elective for Seniors and Upper Middlers. It provides training in voice production, articulation and speech making. Impromptu and prepared speeches help the student to develop poise, fluency and force. The Philomathean Society, founded in 1825, is devoted to discussion and debate. Membership is open to all who are interested in any form of public speaking or the discussion of ideas. Philo holds special classes in debating technique for the benefit of novices. Regular meetings provide forums for the discussion of local, national and international issues. The Society has just recently expanded its program to include model United Nations activi-

ties. From time to time there are debates with visiting teams and once a year a Prize Debating Contest. The organization also sponsors visiting lecturers and discussion leaders to stimulate interest in economic, social and political problems.

The Press Club is a group of students interested in getting the news of Andover's athletic achievements into the newspapers. The club is one of the few that is always busy every Wednesday and Saturday as the members report the scores of all the athletic events to area newspapers. Students with an interest in sports reporting gain valuable experience as they write stories and report on the events.

ENGLISH

Introductory Courses
- 10-English
- 11-Perception and Expression
- 13-English as a Second Language
- 14-Basic Skills
- 16-Language Skills

Required Sequence Courses
- English Competence (two terms)
- Lit A, 20th Century (one term)
- Lit B, 1660-1900 (two terms)
- Lit C, Shakespeare (one term)

Elective Courses
- 18-Efficient Reading
- 401-Philosophy and Literature
- 402-Great Writers Before 1850
- 403-Introduction to Writing
- 404-Hemingway: The Man and his Work
- 405-Afro-American Thought and Letters 1890-1960
- 500-James Joyce
- 501-Man and God
- 508-Modern Playwrights
- 509-Shakespeare: The Man, The Times, The Theater, The Plays
- 511-Writers in Depth
- 513-Novel and Drama Seminar
- 514-Creative Writing
- 517-American Writers of the Twentieth Century
- 518-Milton and Spenser
- 527-Chaucer and his Age
- 528-The Metaphysical Poets, and After



HISTORY AND SOCIAL SCIENCE

The thirty-one courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from modern art to primitive cultures, from the American family to utopian societies. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democracy such as ours, and on the hope that once interest in the story of man has been kindled, it will be pursued for the rest of an individual's life.

The courses for the two lower classes are generally short, term-long introductions to different aspects of man's experience: how the physical world affects him (Geography), how human societies originated (Anthropology), how man makes a living (Economics), how man tries to regulate the society in which he lives (Govern-

ment). The work of individual men is explored through two courses in biography—American and European. None of these courses—in fact no course in the department—uses a formal textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies and slides.

A requirement for the Andover diploma is the yearlong survey course in American History. The course emphasizes discussion and interpretation based on close reading. In the Spring Term students choose their own topics for an extensive paper; they are encouraged to use the raw materials of history—newspapers, letters, diaries, interviews. One student wrote a paper on the attitude of *The New York Times* toward the Russian Revolution; another edited the diary his great grandfather wrote while on a voyage to Zanzibar.

For upperclassmen there is a smorgasbord of courses, including a course on the History of Women from ancient times to the present; for Asian enthusiasts there are courses on India and Southeast Asia; for city-oriented students, courses on the growth of the American city.

The department also offers four courses that involve off-campus study. Well qualified students in the American History survey courses may spend the Spring Term in Washington, working as an intern in the office of a Senator or Representative. Some of these interns have been hired by Congressmen for the following summer. Students interested in problems of the modern American city can spend the Winter Term in a settlement house in Boston, studying at first hand the issues they have read about during the Fall Term. Students interested in modern Mexico can work and study in that country, living for a term with native families.

Each year new courses in History and the Social Sciences are developed, old courses revised or discarded. New members of the department broaden the course offerings with their own special interests. The department believes that each of its eighteen members will generate excitement in his own field of exploration so that the variety of courses offered each year reflects individual Andover teachers. We were pleased that Michael Harrington, Tom Wicker, Jimmy Hoffa and Robert Coles visited and spoke at Phillips Academy in recent years.

SOCIAL SCIENCES

10-Human Geography
12-An Introduction to Government and Politics: A Study of State and Local Government
13-The Development of the Modern Economy
14-China Today
15-The Emergence of Man
16-Major "Isms" and the Nation State
401-Man and Society: Urban Studies
402-Man and Society: Revolutionary Mexico
403-Environments and the Individual
404-Introduction to Economics
405-Man and Society: Studies in Contemporary Mexico

HISTORY

20-Leaders of the Western World: The American Scene
21-Leaders and Issues of the Western World: The European Scene
35-The United States
41-East Asia in Revolution
42-The Discovery of India
43-Modern Europe: A Survey
44-Modern Russia
45-International Relations: The Present Patterns
46-Topics in the History of Phillips Academy and Abbot Academy
47-Victorian England: England in an Age of Expansion
48-The Rise and Fall of the American Presidency, 1940-1974
49-The City in America
50-Schools in America
51-Families in America
52-Quantitative Historical Data Analysis
53-Women in History
54-Art and Architecture in Antiquity and the Middle Ages
55-Art and Architecture in the Renaissance and Baroque
56-Art and Architecture since the French Revolution
57-American Art Reveals American Life
59-Ancient History
60-Elizabethan England
61-The Middle East

MATHEMATICS

The opportunity to study mathematics at Andover is limited only by the interest and capacity of the student. The teaching staff has had a wide variety of training and experience. Some have been engineers, aviators, naval deck officers, navigators, musicians, athletes, or chefs, and all have been well trained in mathematics, most of them having at least a master's degree in their field. They are men and women who have contributed to the teaching profession by writing textbooks, by writing articles for journals, by serving on committees of such national organizations as the National Council of Teachers of Mathematics, the School Mathematics Study Group, and the College Entrance Examination Board Committee. More importantly, they are devoted to teaching a subject which they find fascinating and which they wish to make fascinating for others.

Besides the standard sequential courses the department offers many elective, term-contained and yearlong courses, descriptions of which may be found in the *Course of Study*. Faculty in the department are always willing to guide students in individual projects. Projects have in the past been in such fields as probability, computer programming, computer assembly languages, the theory of numbers, advanced geometry, linear algebra and Markov Chains.

The required sequential courses involve algebra, geometry, logic, statistics, computer programming, elementary functions and elementary probability. The trimester system allows each student to enter the sequence at the appropriate level or even to skip courses in the sequence by demonstrating a grasp of the material. The elementary and advanced elective courses include the study of limits and sequences, mathematical models, elementary and advanced calculus, analytic geometry, differential equations, probability, statistics, computer analysis, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which was completely remodeled in 1964. It houses the campus computer center which offers time sharing in the BASIC-PLUS language through nine public terminals. Instruction and practice in the use of the computer are given in the required course sequence. The computer is a PDP-11/45 manufactured by the Digital Equipment Corporation.

Over one-third of all mathematics at Andover is taken electively, much of it in preparation for the Advanced Placement Examination. In 1975, 131 students took the exam. The community of students who like math at Andover is sizeable, and they share their curiosity and knowledge by offering to tutor other students at the school. The Math-Computer Club stimulates interest in both the use of the computer and in the recreational enjoyment of math. The club has taught students without previous experience how to use the computer and has also arranged lectures on math and computer-related topics.

MATHEMATICS

11-Beginning Algebra
12-Algebra
11-12-Algebra
13-Introduction to Geometry
20-Geometry and Algebra
24-Algebra and Geometry
25-Algebra and Geometry
26-Algebra and Geometry
30-Intermediate Algebra and Elementary Functions
31-Geometry and Circular Functions
37-Algebra and Geometry
38-Transcendental Functions
40-Elementary Functions
21-Intuitive Calculus
39-Algebraic Structure
41-Exploring Data
42-Probability
43-Statistics
44-Statistics
46-Theory of Numbers
47-Computer Programming
49-Problems, Brain Twisters and Puzzles
51-Elementary Calculus
52-Elementary Calculus
53-Elementary Calculus
54-Infinite Series and Differential Equations
55-Honors Calculus
61-Calculus Continued and Other Topics
65-Linear Algebra and Vector Calculus
30-Mechanical Drawing (Elementary)
31-Mechanical Drawing (Intermediate)
32-Mechanical Drawing (Advanced)
30-Navigation (Coastal Piloting)
31-Navigation (Celestial)



"You can't disregard the academics of Andover, because it is their intense pace that electrifies our school... time is very precious. No one has time to sit back or just do nothing. If one enjoys the fast pace, Andover is great. I do."
Kirk McDowell '75

MODERN FOREIGN LANGUAGES

Knowledge of language is the key to communicating with and understanding other people. Foreign languages open the door to other countries and cultures and encourage cooperation between nations. The modern foreign languages offered at Andover are French, German, Russian, Spanish and introductory Italian.

In the first years Andover emphasizes understanding and speaking, and the foreign language is used in the classroom from the first day. Small classes of approximately fifteen students allow each individual the chance to speak often. An extensive language laboratory makes frequent aural-oral practice possible.

Some courses are specifically designed to allow rapid advancement from one level to the next; a student enrolled in one of these courses may accomplish three years' work in two. Courses at the 4th, 5th and 6th year levels may include the study of the art, history, geography and literature of the foreign country. Students may prepare for the Advanced Placement Examination in fourth and/or fifth year courses and then may be able to advance directly into upper level courses at college.

Further opportunity for accelerated learning is offered by School Year Abroad programs in France and Spain (see page 46).

Students, particularly Seniors, may wish to pursue an independent project with the modern language faculty. The project is planned by both student and tutor. Apprentice teaching with a beginning language section has been a popular project for advanced students. Girls and boys may compete in national language prize examinations, and Andover students have consistently done well in these competitions. Language clubs, foreign language plays and movies, and trips to museums all have generated interest in the language program.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and

because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States, as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and enables him to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

The Andover student may at the third year of French elect any sequence of trimester courses in literature, civilization or intensified language study. In the fourth, fifth and sixth years this study can continue in greater depth. School Year Abroad offers a year program in Rennes. A six-week Short Term Institute immersion in French provides further curricular options. A weekly *Veillée*, sometimes a French-speaking dormitory, and a radio program on WPAA give students the opportunity to speak under different circumstances outside the classroom.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Its 100,000,000 speakers embrace not only the populations of West and East Germany and of Austria but also three-fourths of Switzerland. In addition, at least 20,000,000 people speak German as a second language in Holland, Denmark, Sweden, Poland, Czechoslovakia, Hungary, Yugoslavia, northern Italy and eastern France. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism (Marxism) and democracy in the world. Many of the most important developments in modern physics (Einstein's theory), electronics, chemistry and engineering were originally published in German, and American businesses have realized the importance of personnel able to speak German. Germany's leading role in the European Common Market has contributed greatly to the importance of the German language.

Russian

Let's help build bridges! Astronaut Don Slayton is helping. He learned Russian in anticipation of a recent and historic rendezvous in space with the Soviet Union. Our government is helping. It has recently signed treaties which reflect continued hopes of cooperation and mutual respect between the Soviet Union and our country. Together we shall attempt to pursue unsolved problems in medicine, ecology, education, international law and trade, to mention a few. One manifestation is a mutual "think tank" now in its embryonic stage yet destined to play a significant role in the well-being of all our citizens.

Nickolai Shestakov is helping. He is Principal of School No .1 in Minsk, U.S.S.R. Mr. Shestakov spent several weeks at Andover. He and our community mutually discovered friendship, respect, and a willingness to cooperate. We expect that this working relationship will eventually result in an exchange of teachers and students between our schools and communities.

Approximately 40% of Russian secondary school students are learning English. The Soviet Union has many special secondary schools for English in which the major portion of the curriculum (mathematics, science, etc.) is instructed and conducted in the English language. Meanwhile, a fraction of 1% of American secondary school students study Russian. Secondary school is still the best place to begin Russian.

As increasing numbers of participants become involved, will our doctors, legal experts, scientists, educators and businessmen be obliged to carry on all mutual investigations with Soviet counterparts in English? Certainly from the standpoint of mutual respect, this would be a poor beginning.

The obvious solution is an increasing pool of intelligent young American men and women who are not necessarily training to become Russian specialists or translators, but doctors, lawyers, educators, scientists and businessmen who also know the Russian language.

The Russian Department, with four instruc-

tors, most of whom have traveled and studied in the Soviet Union, offers four full years. Well-motivated students of average verbal ability may elect Russian in their Junior year as a first foreign language with complete confidence. Russian as a second foreign language is also a popular choice.

Spanish

The basis for much of the department's teaching is to achieve an understanding and appreciation of the Hispanic outlook, as expressed in the spoken and written word of thinkers and authors from many Spanish-speaking countries throughout the ages.

Not only does the United States have social, cultural and economic ties with Spanish-speaking nations to the south, but within our country there is an increasing number of locales where the use of Spanish is completely natural in the course of daily events. At Phillips Academy, the presence of Spanish-speaking students can, through direct contact both in and beyond the classroom, enrich the learning experience of those enrolled in courses in this language.

The Spanish Department offers a five-year study program in language and literature as well as additional years through acceleration or through School Year Abroad in Spain. Many graduates of School Year Abroad are now studying Spanish in college, helping Spanish-speaking people in the United States, or are good will ambassadors in Spain and in Spanish American countries. In the past few years Spanish students have been an important part of the Lawrence Tutorial Program, the South End Project in Boston and the Man and Society course in Leon, Mexico. Their knowledge of the Spanish language has been an important asset to instructors and participants in these projects.

FRENCH
10-French
10-20-French
11-French
12-French
20-French
21-French
22-French
30A-Language Review and Contemporary French Life
30-Contemporary French Life
31-Selected Readings
32-Village Français
33-Le Monde Francophone: French Civilization Outside of Europe
34-Intensive Conversation and Phonetics
35-Written Expression
36-Literature and Film
38-French for Tourists
39-Initiation to the French Theatre
40-French
42-French Literature
43-French History and Civilization
43-Contemporary French Civilization
44-Advanced Conversation and Phonetics
45-Written Expression and Stylistics
46-Québec et les Québécois
50-French
51-French Language
52-French Literature
60-Contemporary French Literature

GERMAN
10-German
10-20-German
20-German
22-German
30-German Literature
40-German Literature
50-German
60-German

ITALIAN
10-20-Italian

RUSSIAN
10-Russian
12-Russian
10-20-Russian
20-Russian
22-Russian
30-Russian
40-Russian
50-Russian

SPANISH
10-Spanish
10-20-Spanish
15-Spanish
20-Spanish
22-Spanish
30A-Spanish Language Review
30-Aspectos de la cultura y civilización del Mundo Hispánico
32-Spanish
40-Spanish
42-Spanish
52-Spanish
60-Spanish

RELIGION AND PHILOSOPHY

Courses offered in Religion and Philosophy at Andover offer students an opportunity to consider religious, philosophical, ethical and moral questions that confront all of us, and to study the intellectual, existential and spiritual ideas of the past and of the present. All courses in Religion and Philosophy are one-trimester in length, and all are elective. Some of the courses offered in 1975-76 were Introduction to World Religions, Old Testament, New Testament, Religious Themes in Contemporary Literature, Contemporary Ethics, Law and Morality, Contemporary Philosophies of Man.

RELIGION AND PHILOSOPHY

20-The Religions of Man: A Literary Perspective
30-An Introduction to Man's Religions: A Literary Perspective
31-The Old Testament—An Introduction
32-The New Testament
33-Changing Images of God and Man
40-Contemporary Ethics
42-Law and Morality: A Study in Political Philosophy
43-Ethical Issues in the Sciences
50-Existentialism and Philosophy
51-The Existence of God
52-Contemporary Philosophies of Man
53-The Great Philosophers

SCIENCE

Archaeology

The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last 75 years and has published many reports of its scientific investigations. The staff of the Foundation offers Andover students an introductory term-contained course in archaeology in the fall term. The course deals with the prehistoric development of civilization in the four earliest centers: Mexico, Peru, China and the Near East, as well as with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum assist in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

Present research is concerned with the origins of agriculture and the concomitant rise of civilization in the New World. Major publications based on the analysis of these materials are now being printed. Continuing research programs are planned for Mexico, Peru and possibly, in the coming year, China. The Peabody Foundation is under the direction of Dr. Richard S. MacNeish, a member of the National Academy of Sciences of the United States.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to the basic biology course, the department offers advanced level courses in ecology, animal behavior and advanced placement biology. The basic course gives students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides and films are all part of the course.

Animal Behavior studies wildlife in eastern Massachusetts. The course plans field trips to the coast, salt marshes, lakes and wooded areas within a few hours of Andover. Every student undertakes



a serious study of some common animal.

The term-contained ecology course begins by presenting a solid foundation in the basic concepts —energy flow, nutrient cycles and population dynamics. The ways man has affected and disturbed his environment are the main topics of the remaining two-thirds of the course. The laboratory is well equipped to test water for pollutants. Demonstrations and micro- and macroscopic studies of communities are also included in the course.

An advanced biology course prepares older students for the Advanced Placement exam. The material offered by the basic biology course is reviewed, and new concepts, techniques and examples are also presented. The labs give students experience in the techniques of centrifugation, chromatography, electrophoresis, spectrophotometry and statistical analysis.

Informal field trips are held throughout the year for interested students who may or may not be currently enrolled in a biology course. The small zoo in Evans Hall is maintained by students. Its population varies with student interests and the reproductive rate of the animals. The department is equipped with a phase microscope and several camera attachments for studying photomicrography. In the basement of Evans Hall we have an extensive bird collection on loan from Harvard University.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in photoperiodism. Facilities are also available for the study of many aspects of bacteriology. Independent study is encouraged, and, indeed, is the basis of several of the term-contained courses.

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, draw many species of small land birds and provide nesting places for grouse and pheasant.

The Natural History Club organizes field trips to fresh and salt water marshes, quaking bogs and other typical New England habitats. In recent years it has acted as the ecology lobby on campus fighting to maintain the quality of the human environment and to heighten the community's awareness of current developments in this area. Working with students from neighboring schools and adult members of the community from Andover Ecology Action, the Natural History Club has been instrumental in developing the town's recycling program, in banning the use of certain pesticides, and in preserving natural areas of the town of Andover.

Chemistry

The Chemistry Department offers full-year introductory courses at various levels. Chemistry 42, 44 and 45 enable students to continue work in chemistry after completing the first course.

Students have undertaken many special projects in the well-stocked laboratory. For example, one student recently investigated the "Miller experiment," the synthesis of amino acids by electric discharge through methane, water vapor and ammonia. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Two students have studied organic qualitative analysis as an introduction to the chemistry of organic functional groups. Although qualitative analysis has been included in the latter part of many elementary courses in organic chemistry, this may be the first instance of its use at the very beginning.



Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including five Mettler single-pan analytical balances. There are instruments which enlarge the scope of feasible projects—a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Convenient access to the computer (PDP-11, resource time-sharing system) in the Mathematics Department is provided by a teletype terminal located in the Chemistry wing of Evans Hall.

Physics

The Physics Department teaches four basic courses of various degrees of difficulty. All require laboratory work and consist of classroom demonstrations, discussions and problem solving. It also offers courses in earth science, meteorology, astronomy, physical science and the history of science for younger students, as well as electronics, astronomy and college level advanced placement physics courses for older students.

Project work may be done for credit or merely for one's own satisfaction. In recent years students have transmitted conversations by means of laser beams and built a Van de Graff proton accelerator. One boy worked on holograph experiments; another built his own electronic calculator. Other students have used sophisticated equipment to measure the velocity of light, determine Plank's Constant and perform experiments of their own design.

The Astronomy Club has a six-inch Brashear refracting telescope mounted in a dome on top of Evans Hall and an eight-inch Celestron telescope. Equipped with a new clock drive, the Brashear telescope can be used for both visual observation

of the planets and stars as well as deep sky astrophotography.

The Model Airplane Club provides facilities for the construction of model aircraft and a meeting place for students with an interest in flying both model and real aircraft. The club offers three kinds of flying activities—free flight, control line and radio controlled airplanes—and tries to fly at least once a week during the fall and spring, though limited to control line model flying in the Cage in winter time.

The fifty-year-old Amateur Radio Club can provide all the necessary theory, teaching and equipment to help a student get a novice (or higher) license. Members of the Mechanics Club may bring to the school a car or motorcycle to work on during the year. The club also sponsors its own projects: working on faculty-owned cars or a vehicle purchased by the club. For all "rockhounds" the Mineral Club organizes field trips. In a room equipped for the sorting, listing and polishing of minerals, the Mineral Club plans case displays of collections.

Psychology

The Department of Psychology offers four term-contained courses, three for Uppers and Seniors, one for Lowers and Juniors. The course for underclassmen is concerned with the psychology of human behavior as it relates to life in a residential school. The courses for upper classmen include an introductory course in psychology, a course in human sexuality and a course in the psychology of human behavior in small groups.

Individual instructors in the department welcome the opportunity to discuss special interests with any student and have sponsored individual projects such as a study of student values, the evaluation of a social service experience and a program of reading and discussion in a specialized branch of the field.

The Psychology Club is an extra-curricular activity with a program responsive to the wishes of members. Lectures by visiting specialists, movies and other resources form the basis for group discussions of general topics, small special-interest group meetings and projects that involve reading, reporting, and field trips.

ARCHAEOLOGY
25-Archaeology

SCIENCE
10-Science
11-Preparation for the Physical Science
12-Earth Science
13-The Solar System
14-History of Science
15-Oceanography
16-Ecology
19-Introduction to Physics
30-Energy and the Future
30-Biology
43-Biology
44-Biology
45-Biology
20-Chemistry
30-Chemistry
42-Research in Chemistry
44-Chemistry
45-Chemistry
48-Chemistry
25-Physics
30-Physics
40-Physics
45-Physics
50-Relativity and Quantum Mechanics
30-Animal Behavior
30-Observational Astronomy
35-Topics in Modern Astronomy
31-Introduction to Ecology
34-Geology

PSYCHOLOGY
10-Human Awareness
30-Human Relations
31-Human Sexuality
32-Introductory Psychology

Other Courses

INTERDISCIPLINARY
10-Study Skills
40-Synthesis: A Multidisciplinary Approach to Problems
500-Russian Literature in English
501-Soviet Literature in English

PHYSICAL EDUCATION
10-Physical Education





Complementary Programs

THE COMPLEMENTARY SCHOOLS PROJECT

The Complementary Schools Project combines a group of innovative programs and ideas at Phillips Academy. Established in 1972, the Project was designed as a means of better coordinating public and private education nationally. Behind the CSP concept is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools idea has taken form in several program models under CSP, which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work—harder work than most students have ever before experienced. Besides English, modern and classical languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Acting and Directing Workshop, Social Psychology, Medicine and Law, Masters of the American Film, Archaeology and Anthropology, Economics, and the American Presidency. In addition, courses at the Advanced Placement level are taught in Calculus, U.S. History, English, Spanish, French, Chemistry, and Biology.

A special feature of the Summer Session is the Chamber Music Program which provides a unique opportunity for musical students in all combinations of piano, strings, winds, and voice including individual instruction, small ensemble work, orchestra, and chorus. The program is an integral part of the Summer Session with class hours, afternoon activities, mealtimes, etc., the same for music participants as for all other students.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th, or 12th grades. The faculty and staff are an expert and diverse group of men and women some of whom come from Phillips Academy and some from other schools and colleges. A catalog may be obtained by writing The Andover Summer Session, Phillips Academy, Andover, Mass. 01810 or calling 617/475-3400, ext. 172.

The Short Term Institutes

The Andover Short Term Institutes are intensive, six-week courses of study in a single subject, and are primarily intended for day school students. First taught in the fall of 1974, these Institutes are scheduled during the fall, winter, and spring of the academic year. Each intensive six-week Institute typically covers up to one year's worth of material in the subject studied.

The average Institute enrolls a dozen students. While the curriculum changes from year to year, the STI program usually offers study in modern languages, physical and biological sciences, mathematics, and English. All Institutes

are taught by regular Phillips Academy faculty members.

STIs offer secondary school students the chance to complement their education with a unique form of intensive, residential study. Students live together in a complex of dormitories on campus and participate in a variety of cultural and social activities at Andover and in Boston. Further information can be obtained by writing to:

Mrs. Jean McKee, Admissions Director, The Short Term Institutes, Phillips Academy, Andover, MA 01810.



SCHOOL YEAR ABROAD

School Year Abroad conducts programs for upper classmen in France and Spain. Originated by Andover as an off-campus program, it was later jointly sponsored by Andover, Exeter and St. Paul's. Students may spend a full academic year living with host families while pursuing a course of study under the supervision of teachers from the original sponsoring schools. The program provides full academic credit, permitting students to graduate from Phillips Academy with their own class, as well as the experience of immersion in a foreign culture. Qualified upper middlers and seniors, who will have completed the American History and Laboratory Sciences requirements, are eligible for School Year Abroad. A catalog can be obtained by writing School Year Abroad, Samuel Phillips Hall, Phillips Academy, Andover, MA 01810.

OTHER COMPLEMENTARY PROGRAMS

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers to spend the spring term in Washington working in the offices of U.S. Senators and Congressmen. Students in the Man and Society course may spend a winter term of work and study in Boston or Mexico.

In addition to school-sponsored programs, many Seniors arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.



Athletics

Andover has a comprehensive athletic program. Sports, physical education and outdoor programs are all important to the Andover curriculum and involve every student. The main objective is the development of physical skills and self-confidence, courage and self-control. The program responds to the capabilities and interests of individual students. Most students are involved in intramural and interscholastic sports. Games are scheduled with neighboring schools and with college freshmen. Junior boys have their own athletic program; for all other students the levels of competition are graduated from intramural to junior varsity to varsity programs. To insure balanced competition, a physical co-efficient factor is used in scheduling both interscholastic and intramural contests. A separate girls' gymnasium insures an athletic program particularly suited to the needs of young women. A team of trainers and an Infirmary staff skilled in sports medicine care for boys and girls involved in sports.

Competitive sports are supplemented by a range of non-competitive and non-traditional athletic pursuits. Over a decade ago Andover was instrumental in bringing the Outward Bound program to the United States. Since that time the school has developed a sophisticated outdoor activity curriculum that includes rock climbing, winter mountaineering, cycling, snowshoeing, camping, solo survival, orienteering and ski-touring. Weekend expeditions are complemented by daily skills training, group problem solving and short trips. In the past two years individual faculty members have taken Search and Rescue students

on expeditions over vacation to Colorado, Mexico and Nepal.

To make certain that each student has a chance to develop physical skills, a basic evaluation test is administered to all new girls and boys. New Juniors and Lower Middlers have physical training four hours a week for one term of their first year, in addition to regular athletics. This non-competitive program consists of drown-proofing (survival swimming), gymnastics and rope training. The standards of performance are based on each student's physical capacity and his or her mental and emotional reaction to controlled stress situations. It is designed to develop a sense of personal achievement and success. The self-confidence and new physical skills gained in the first year assist students as they move into more advanced stages of physical training.

Non-swimmers are given special instruction to insure that they can meet reasonable standards of proficiency. Each spring the department also offers at a nominal fee a Senior Life Saving course and a Water Safety Instructors course for the proficient swimmers who wish official accreditation. The Andover Athletic Advisory Board is a student organization which works with the Athletic Department to make school athletic policy.

There are many school groups organized for particular athletic activities. A Karate Club teaches the elements of that martial art. The Judo Club provides training in judo, and for those more advanced, instruction in self-defense and in the artistic and philosophical aspects of judo. The Rifle Club is a large group of students who shoot noncompetitively, for National Rifle Association awards or for the school team, which has a full schedule of interscholastic competition. The Ski Club organizes trips to New Hampshire ski areas, including Cannon, Wildcat, Loon and other mountains. It also sponsors movies on ski racing.

Every year an exotic range of informal student-inspired sports activities comes into being and dominates the long spring evenings. Recent years have featured stickball, boxball, cart races, paddle tennis and kite flying.



FALL TERM

Girls
Field Hockey
Soccer
Tennis
Riding
Cycling
Karate
Search & Rescue
Crew
Cross Country

Boys
Football
Tennis
Cycling
Search & Rescue
Crew
Cross Country
Soccer
Golf
Karate

WINTER TERM

Girls
Track
Swimming
Basketball
Skiing:
Competitive
Cross Country
Paddle Tennis
Squash
Ballet
Modern Dance
Gymnastics
Search & Rescue

Boys
Track
Swimming
Hockey
Wrestling
Basketball
Skiing:
Competitive
Cross Country
Paddle Tennis
Squash
Gymnastics
Search & Rescue

SPRING TERM

Girls
Softball
Track
Lacrosse
Tennis
Crew
Karate
Search & Rescue
Canoeing
Cycling
Kayaking
Riding
Ballet

Boys
Baseball
Softball
Track
Lacrosse
Crew
Karate
Search & Rescue
Canoeing
Cycling
Kayaking
Tennis
Ballet

Health Care

The Isham Infirmary-Hospital of Phillips Academy is accredited by the Joint Commission on Accreditation of Hospitals and is fully licensed as a hospital by the Commonwealth of Massachusetts. The hospital has an x-ray department and clinical laboratory with a full-time technician. Qualified physiotherapists are available either in the Infirmary or Trainer's Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 5:00 p.m. Isham Infirmary-Hospital is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

In addition to the daily outpatient clinic held by the Medical Director, who is a specialist in internal medicine, regular clinics are conducted at Isham Infirmary-Hospital in dermatology, orthopedics, and dentistry. Staff consultants are available in most specialty fields of practice, and full-time clinical psychologists can provide professional counseling.



Tuition, Financial Aid, and Expenses

TUITION 1976-77

Annual tuition fees for 1976-77 are $4200 for boarding students and $3300 for day students (who must live in Andover, North Andover, North Reading, Methuen, or Lawrence). Normally, one-half of the tuition is payable on August 15, and one-half on December 15.

Tuition may also be paid in ten equal monthly installments starting on August 1 and ending on May 1. A service charge of one percent of the total year's tuition is made for this plan. Another alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about these two alternatives, and application forms are sent to parents before the first bill is due.

No rebate will be made against the amount of the tuition installment due on August 15 for any student who for any reason is dismissed or withdrawn after the opening of school in the fall. No rebate will be made against the tuition installment due on December 15 for any student who is dismissed or withdrawn after returning to school at the beginning of the winter trimester.

The tuition charge covers instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and the authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures. An additional charge of $30 is due with the first tuition payment for providing and laundering bed linen of the boarding student.

The tuition charge does not include tutoring, language training, special instruction in music or certain athletics, materials fees for art courses, medical insurance, dental care, special medical expenses, laundry, textbooks, dues to school organizations, or breakage and damage to school property. All protective athletic equipment and uniforms are furnished by the school; however, all students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the regular tuition charge may be rendered at any time during the school year.

Students otherwise eligible to return in a given school year will not be allowed to register if their school accounts for the preceding year have not been paid in full. The diploma of the Academy will not be awarded to students whose school accounts are not paid in full by June 1. Tuition and fees for the school year, 1977-78, will be set by the Trustees at their January 1977 meeting.

Parents or students may open a student drawing account at the Treasurer's Office for personal expenses during the school year.

Other Expenses

As a rough guide to parents in budgeting for the total expected expenses of each academic year, the following low-average approximations of extras are given.

Travel	According to home location
Athletic equipment	$ 75.00
Laundry and cleaning	125.00
Medical insurance (optional)	35.00
Books and supplies	150.00
Dues, publications and charitable contributions	20.00
Breakage deposit (refundable)	50.00
Miscellaneous, including spending money	120.00

FINANCIAL AID

Over three hundred families receive financial aid in the form of a scholarship grant, a long-term low interest loan or a combination of both. In 1976-77, $925,000 will be available for financial assistance. Approximately $250,000 is reserved for new students. The dollar amount of the assistance varies from $500 to full tuition. Each family indicating a need for assistance on the Preliminary and Final Applications will be mailed a Parent's Financial Statement which is processed by the School Scholarship Service in Princeton, N.J.

All awards are reviewed annually and a Parent's Financial Statement must be filed each year if continued aid is needed.



Admissions

The school's constitution, written in 1778, states that Andover "shall be ever equally open to youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over two thousand candidates the three hundred fifty most promising and deserving young people. The school's endowment covers approximately 50 percent of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section).



APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure by February 1, and they may expect a decision from the Admissions Committee by March 10. The possibility of admission is somewhat lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of $100 is required to reserve a place at the time admission is offered to an applicant.

The four steps for Application

1 Submit the Preliminary Application Card and the non-refundable $15 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.)

2 Complete the Personal Interview requirement. An interview is required of all applicants. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Candidates who cannot visit the school, however, should arrange to have an interview with an Alumni Representative in their geographical area. (See page 54.)

3 Return the Final Application Forms. Final Application Forms are mailed in mid-November to candidates who have submitted a Preliminary Application card for the following fall. Forms should be returned within three weeks of receipt. (Late applicants should return forms immediately.)

4 Take the Secondary School Admissions Test. (12th grade or Postgraduate candidates should refer to the information on this page.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1977-78 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 11, 1976 — March 5, 1977
January 15, 1977* — April 16, 1977
May 21, 1977*

*International administration

Candidates are strongly urged to take the SSAT administered in December, 1976. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1977 administration.

Senior Class Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the



Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests. (C.E.E.B., Box 592, Princeton, NJ 08540.) After the test date candidates must ask the College Board, in writing, to send all test results to Phillips Academy. A check or money order for $2 made out to C.E.E.B. must accompany that request. A number of well-qualified Postgraduates admitted each year are treated as full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

Whom to Contact at Andover

If you have questions about Andover's admissions or application procedures, please contact the Admissions Office.

Director of Admissions: Joshua L. Miner

Address: Admissions Office
Phillips Academy
Andover, Massachusetts 01810

Office hours: Monday through Friday, 9:00 a.m. to 5:00 p.m.
Saturday, 9:00 a.m. to 12:00 noon

Telephone: 617/475-3400

Early Decision

Andover will not participate in any early decision plan for admissions in September, 1977.

ALUMNI REPRESENTATIVES

Candidates who are unable to visit Andover should arrange an interview with one of the Alumni Admissions Committee members listed below. It is suggested that a telephone call be made or a letter sent in advance to establish a mutually convenient time. A candidate who finds it difficult to visit one of the interviewers listed below should communicate with the Admissions Office in Andover. An effort will be made to locate an additional representative from that area among the graduates of either Phillips or Abbot Academy.

Admissions Interview Schedule

During the coming school year the Director of Admissions and representatives from the Administration plan to be in the following cities:

October 4-8	Seattle and San Francisco
October 18-22	Cleveland and Chicago
November 8-12	St. Louis and Memphis

Candidates wishing to complete the interview requirement in one of these areas should contact the local Alumni Representative whose name shows in asterisk on the following list, or they may arrange an appointment by writing or telephoning the Phillips Academy Admissions Office in advance of the visit.

ALABAMA

Birmingham

Miss Jacqueline Carter '72
P.O. Box 7964 35228

Robert B. Donworth, Jr. '42
Bradley, Arant, Rose & White
Suite 1500 Brown-Marx Bldg.
2000 First Avenue North 35203

ALASKA

Anchorage

John K. Brubaker '55
2110 Otter Street 99504

Howard S. Reed '45
6112 Prosperity Street 99504

Juneau

Cadmus Z. Gordon, Jr. '16
The Teen Age Club
Box 1153 99801

ARIZONA

Litchfield Park

George T. French '29
P.O. Box 578
609 North Litchfield Road 85340

Phoenix

Mrs. William M. Riegel '53
4941 East Rockridge Road 85018

Scottsdale

Mrs. William E. Dampier '47
4721 North 70th Street 85257

Tucson

Keith S. Brown '31
3200 North Swan Road 85712

John S. Greenway '42
1634 North Olsen Avenue 85719

Donald B. Rollings '70
3801 E. Calle Barcelona 85716

ARKANSAS

Little Rock

Mose Smith, III, M.D. '48
5326 West Markham Street 72205

CALIFORNIA

Berkeley

Patrick J. O'Hern '65
1742 Curtis Street 94702

Beverly Hills

John J. Leone '66
William Morris Agency
151 El Camino 90212

Thompson K. Vodrey '52
1529 Gilcrest Drive 90210

Davis

Donald M. Reynolds '38
4 Parkside Drive 95616

Irvine

John E. Kidde '64
4881 Royce Road 92664

La Jolla

William S. Creighton '39
1011 Skylark Drive 92037

Los Altos

Philip J. Kann '71
327 Lunada Court 94022

Los Angeles

David A. Cathcart '57
Gibson, Dunn & Crutcher
515 South Flower Street 90017

George W. Davis, III, M.D. '52
4616 Keniston Avenue 90043

Walter L. Farley, Jr. '28
12300 1st Helena Drive 90049

Manhattan Beach

Mrs. James P. Regan '57
1717 Highland Avenue 90266

Marysville

Harold S. Edwards '28
770 Ramirez Road 95901

Mill Valley

Peter W. Lee '60
80 Montecimas Avenue 94941

Palo Alto

Henry E. Riggs '53
634 Lowell Avenue 94301

Donald A. Way '63
P.O. Box 338 94302

Pasadena

Russell M. Decker '56
691 Holladay Road 91106

Riverside

Peter C. Parsons '55
Riverside County Publishing Co.
P.O. Box 8368 92505

Ross

H. Leonard Richardson '45
1 Circle Drive 94957

San Anselmo

Ivan B. Higgins, Jr., M.D. '62
10 Elm Avenue 94960

San Diego

Norman R. Allenby '51
3222 Quimby Street 92106

San Francisco

Mrs. James K. Brown
2940 Clay Street 94115

Samuel Dysart, Jr. '46
Dymo Industries, Inc.
1 Embarcadero Center 94111

Miss Dorothy M. Easton '61
1376 Clayton Street 94114

Thomas E. Pollock, III '61
Cooley, Godward, Castro,
Huddleson & Tatum
1 Maritime Plaza 94111

William W. Sterling '57
Heller, Ehrman, White &
McAuliffe
30th Floor
44 Montgomery Street 94104

San Mateo

*Alan L. Fox '60
177 Bovet Road 94402

Santa Barbara

Mancel T. Clark, Jr. '28
605 San Ysidro Road 93108

Shingle Springs

Marshall T. Gleason '33
3067 Cambridge Road 85682

Stanford

Miss Marna Parke '72
Stanford University
Box 9248 94305

COLORADO

Aspen

Stephen W. Harris '38
P.O. Box 1653 81611

John P. McBride '56
105 Pacific Avenue 81611

Boulder

Mrs. Constantinos Emmanuel '54
3065 Heidelberg 80303

Colorado Springs

Mrs. William Boddington '41
1433 Alamo Avenue 80907

Denver

Peter Grant '49
545 Race Street 80206

John F. Malo '40
Malo Feed Company
909 17th Street, Suite 308 80202

David C. Wilhelm '38
Wilhelm Foods, Inc.
P.O. Box 16086 80216

Golden

William D. Lynch '38
14295 Braun Road 80401

Grand Lake
James E. Liles '55
818 Shadow Mountain Drive
80447

CONNECTICUT
Greenwich
Roger S. Seymour '44
50 Porchuck Road 06830

New Haven
Nathaniel M. Cartmell, Jr. '42
The Campaign for Yale
155 Whitney Avenue
Box 2038 06521

Stonington
Ms. Nancy Roberts '68
R.D. #1, Box 48
Flanders Road 06378

DELAWARE
Wilmington
Mrs. Robert Bryant '65
2309 Saymoure Road 19805

Mrs. Reeves W. Hart, Jr. '47
18 Briar Road
Briarwood 19803

DISTRICT OF COLUMBIA
Washington
George W. Beatty '50
3438 34th Place, N.W. 20016

Lawrence C.Dalley, Jr. '45
Group Insurance Administrators, Inc.
888 17th Street, N.W. 20006

Peregrine White '29
National Academy of Sciences
2101 Constitution Avenue, N.W.
20418

FLORIDA
Jacksonville
Laurence F. Lee, Jr. '40
P.O. Box 4214 32203

Arthur W. Milam '45
Milam & Wilbur
P.O. Box 58
1700 Barnett Bank Bldg. 32201

Robert D. Van Cleve '50
Riverside Clinic
2005 Riverside Avenue 32204

Miami
David J. Williams, II '38
13815 S.W. 84th Street 33143

Naples
Robert W. Hattemer '49
440 Spinnaker Drive 33940

Sarasota
Parker C. Banzhalf '38
3435 Sea Grape Drive 33581

Winter Haven
Richard C. Cheney '48
1826 Sixth Street, S.E. 33880

Andrew P. Ireland '48
Barnett Bank of Winter Haven
P.O. Box 820 33880

GEORGIA
Atlanta
D. Hayes Clement '54
Arthur Andersen and Co.
25 Park Place, N.E.
30303

Herbert R. Elsas '28
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A.B., Bowdoin; M.A., Harvard; Ph.D., University of North Carolina

ROBERT LEE CRAWFORD (1971)
Co-Director of College Counseling; Instructor in History and the Social Sciences
B.A., Northwestern; S.T.B., The General Theological Seminary; M.A., University of Pennsylvania

LINDA CREGG (1973)
Instructor in French
A.B., Smith College; A.M., Boston University

GEORGE MACNAMARA DIX (1972)
Instructor in Modern Languages
A.B., Brown; A.M., Middlebury

SHERMAN FREDERICK DRAKE (1953)
Instructor in Mathematics
B.S., U.S. Naval Academy; Ed.M., Boston University

ROBERT DICKERSON DRENNAN (1974)
Associate Director of Robert S. Peabody Foundation; Instructor in Anthropology
A.B., Princeton; M.A., University of Michigan; Ph.D., University of Michigan

FRANK McCORD ECCLES (1956)
Dean of West Quad South Cluster; Instructor in Mathematics
B.S.M.E., Princeton; M.A., Harvard

HELEN M. ECCLES (1975)
Director of Public Information; House Counselor
A.B., Bryn Mawr

GEORGE HOWARD EDMONDS (1961)
College Counselor; Instructor in English
A.B., Amherst; Ed.M., Harvard

PATRICIA HOPE EDMONDS (1974)
Development Officer for Foundations; House Counselor, Johnson Hall South
A.B., Mount Holyoke; M.A.T., Harvard

MARION FINBURY (AA1969)
Co-Director of College Counseling
A.B., Vassar

SALLY ELAINE FISCHBECK (1973)
Instructor in Mathematics
A.B., University of Rochester

OWEN J. FLANAGAN, JR. (1974)
Instructor in Philosophy
A.B., Fordham University; A.M., Boston University; Ph.D., Boston University

HARPER FOLLANSBEE (1940)
Instructor in Biology on the Samuel Harvey Taylor Foundation
A.B., Princeton; Ed.M., Harvard

†*DIANNE MOON FOSTER (1974)
House Counselor
A.B., University of Southern California

†*JERRY FOSTER (1969)
Director of the Complementary Schools Project; Instructor in English
A.B., University of Southern California; M.A., University of California at Los Angeles

WAYNE ANDREW FREDERICK (1962)
Instructor in History and the Social Sciences on the Emilie Belden Cochran Foundation
B.S., Northeast Missouri State University; Ph.M., University of Wisconsin

CAROLYN ELIZABETH GOODWIN (AA1947)
Dean of the Academy; Instructor in Mathematics
A.B., Smith; A.M., Smith

DONALD HAVERSTICK GOODYEAR, JR. (1968)
Instructor in English
A.B., Williams; A.M., Harvard; Ph.D., Harvard

WILLIAM FRANKLIN GRAHAM (1952)
Associate Dean; Instructor in Mathematics
S.B., University of Michigan

RICHARD CHARLES GRIGGS (AA1969)
Associate Director of Admissions; Director of Financial Aid
A.B., Princeton

CHRISTOPHER JUDE GURRY (1974)
Instructor in Physical Education; Instructor in History and the Social Sciences
A.B., Harvard

JUDITH ADAMS HAMILTON (1974)
Dean Flagstaff Cluster
A.B., Tusculum College

THOMAS ROBERT HAMILTON (1969)
Instructor in Biology
B.S., Tusculum College; M.S., University of Pennsylvania; M.A.T., Brown University

EDMOND EMERSON HAMMOND, JR. (1953)
Chairman of the Mathematics Department; Instructor in Mathematics
S.B., Haverford; Sc.M., Brown

*FRANK LEE HANNAH (1968)
Instructor in Mathematics
A.B., Dartmouth; A.M., Dartmouth

DAVID TAVERNER HANSON (1975)
Instructor in Art
A.B., Stanford

DOUGLAS RAY HARDIN (1973)
Instructor in Physical Sciences
A.B., Harvard; Ph.D., University of Cambridge

FRED HAROLD HARRISON (1952)
Chairman of the Athletic Department and Director of Athletics; Instructor in History and the Social Sciences
A.B., Yale; A.M., Trinity

MARJORIE ALEXANDER HARRISON (AA1968)
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BARBARA E. HAWKES (AA1972)
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A.B., Tufts; M.S., Northeastern

VICTOR WILLIAM HENNINGSEN, III (1974)
Assistant Director Alumni Affairs
A.B., Yale

MAURY PAUL HEPNER (1973)
Instructor in Mathematics
B.S.E., Princeton; M.A., Harvard; Ph.D., Harvard

HENRY LYNN HERBST (1972)
Instructor in French
A.B., Hamilton College; A.M., University of Pennsylvania

SALLY CHAMPLIN HERBST (1974)
House Counselor, Abbot Stevens West
A.B., Mount Holyoke College

GUNILLA ELS-CHARLOTTE NILSSON HILL (1972)
Instructor in English and Psychology
B.A., Smith; M.A.T., Harvard

ALOYSIUS JOHN HOBAUSZ (1968)
Director of the Audio-Visual Center
S.B., Puskas Telecommunication Institute, Budapest

LOUIS JOHN HOITSMA, JR. (1953)
Instructor in Mathematics
B.S., College of William and Mary; Ed.M., College of William and Mary

ROBERT PENNIMAN HULBURD (1953)
Director of Alumni Affairs
A.B., Princeton; A.M., Middlebury

CAROL ANN IRISH (1973)
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A.B., William Jewell College; M.A., University of Minnesota; Ph.D. University of Minnesota

DAVID EMMETT IRWIN, JR. (1975)
Instructor in Music
B.M., Florida State University; M.Mus., Yale Music School

CAROLYN LUMSDEN JOHNSTON (AA1965)
Associate Dean
A.B., Radcliffe

DOROTHY Y. JUDD (AA1948)
Instructor in Spanish
B.S., College of William and Mary; M.A., Columbia University; M.A., Middlebury

PAUL KALKSTEIN (1970)
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A.B., Princeton; M.A.T., Yale

NICHOLAS VAN HOUTEN KIP (1968)
Instructor in Classics
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CATHERINE JEANNE KIRKLAND (AA1968)
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Licence ès Lettres, Sorbonne; Maitrise, Sorbonne

CHRISTOPHER DUNBAR KIRKLAND (1968)
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A.B., Harvard

MARC DANA KOOLEN (1974)
Instructor in Biology
B.S., St. Lawrence University

GEORGES NICOLAS KRIVOBOK (AA1969)
(Director, School Year Abroad, Rennes, France through 1976-77)
Instructor in French and Russian
B.A., Swarthmore; M.A., Middlebury

MARIE-LUISE KRIVOBOK (1974)
House Counselor
R.N., Sankt Hedwig Klinik, W. Germany

CARL EDWARD KRUMPE, JR. (1960)
Chairman of the Classics Department; Instructor in Classics
A.B., Wabash College; A.M., Brown University

ALEXANDRA REWIS KUBLER-MERRILL (AA1972)
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B.A., Smith; M.A.T., Yale

ROBERT EDWIN LANE (1955)
Instructor in Latin and Russian on the Alfred Ernest Stearns Foundation
B.A., University of California at Berkeley; M.A., University of California at Berkeley

ROBERT ANDREW LLOYD (1962)
Chairman of the Art Department; Instructor in Art
B.A., Harvard; M. Arch., Harvard Graduate School of Design

SUSAN McINTOSH LLOYD (AA1968)
Instructor in History and the Social Sciences
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JOHN RICHARD LUX (1949)
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ELLEN CANBY LYNCH (1974)
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THOMAS TOLMAN LYONS (1963)
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Admissions Officer
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A.B., Yale University; M.Ed., University of Pittsburgh

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Director of the Oliver Wendell Holmes Library
A.B., Boston University; B.L.S., Simmons

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Director of Admissions for the Complementary Schools Project
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Director of the Robert S. Peabody Foundation for Archaeology; Instructor in Archaeology
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STEPHEN PIKE MARX (1970)
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Director of Admissions
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RONN NELS MINNÉ (1965)
Chairman of the Division of Science; Instructor in Chemistry on Martha Cochran Foundation
B.S., Northwestern; A.M., Northwestern; Ph.D., Harvard

CLEMENT MORELL (1958)
Dean of Pine Knoll Cluster; Instructor in Mathematics
B.A., Northern Michigan; M.A., University of Michigan; M.S., University of Illinois

HERBERT HARRY MORTON, III (1975)
Instructor in Mathematics
A.B., Dartmouth

MICHAEL EDWARD MOSCA (1966)
Director of Accounting
B.A., Boston University; M.B.A., Boston University

WILLIAM ABBOT MUNROE (1960)
Associate Treasurer
A.B., Harvard

GEORGE A. NEILSON, JR. (1972)
Business Manager
B.S., Boston University; M.Ed., Boston University

DANIEL DRETZKA OLIVIER (1964)
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A.B., Yale; M.Div., Union Theological Seminary

†DAVID ALBERT PENNER (1966)
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ROBERT PETER PERRIN (1973)
Instructor in Mathematics and Physics
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THOMAS REES (1960)
Instructor in Chemistry
B.E., Yale; M.S., Yale; Ph.D., Yale

THOMAS JOSEPH REGAN (1955)
Chairman of the English Department; Instructor in English
B.A., Yale; M.A., Boston University

JOHN RICHARDS, II (1959)
Chairman of the Cluster Deans; Dean of Rabbit Pond Cluster; Instructor in History and the Social Sciences on the Alfred Lawrence Ripley Foundation
A.B., Harvard; M.A.T., Harvard

SHIRLEY J. RITCHIE (AA1950)
Instructor in Physical Education
B.S., Trenton State College

ALBERT KARL ROEHRIG (1954)
Director of Counseling; Chairman of the Department of Psychology; Instructor in Psychology
A.B., Amherst; Ed.D., Harvard

HARRISON SCHUYLER ROYCE, JR. (1956)
Instructor in History and the Social Sciences
A.B., Amherst; M.I.A., School of International Affairs, Columbia

ANGEL RUBIO Y MAROTO (1965)
Instructor in Spanish
Título de Bachiller, Universitario, Madrid; Título del Magisterio, Madrid; M.A., Washington University

CRISTINA ALONSO RUBIO (AA1965)
Instructor in Dance
Licensed by the Spanish Academy of Performing Arts

JEAN MARY ST.PIERRE (AA1963)
Instructor in English
A.B., Wheaton; M.A., Columbia

EDWARD JAY SARTON (1972)
Chairman of the Andover Evening Study Program; Instructor in Physics
B.S.E., Princeton; M.S.E., University of Southern California

†WILLIAM LOUIS SCHNEIDER (1949)
Instructor in Music
Mus.Ed.B., Northwestern

NATALIE GILLINGHAM SCHORR (1974)
Instructor in French
B.A., McGill; d.e.s., Aix-Marseille; M.A., University of Pennsylvania

GILBERT TENNANT SEWALL, II (1970)
Instructor in History and the Social Sciences
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MARIE ELIZABETH SHAFFER (1974)
Assistant Director Complementary Schools Project
B.A., Dartmouth

RICHARD EUGENE SHEAHAN (AA1969)
Associate Secretary of the Academy

GERALD SHERTZER (1957)
Instructor in Art
B.F.A., Yale; M.F.A., Yale

NANCY FAUST SIZER (1973)
Instructor in History and the Social Sciences
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THEODORE RYLAND SIZER (1972)
Headmaster; Instructor in History and the Social Sciences
A.B., Yale; M.A.T., Harvard; Ph.D., Harvard; Ped.D., Lawrence University; Litt.D., Union College

NATHANIEL BALDWIN SMITH (1965)
Dean of West Quadrangle North Cluster; Instructor in Mathematics
B.S.E., Princeton; M.A., Northwestern

JOHN MacDONALD SNYDER (1970)
Curator of Photography, Addison Gallery of American Art; Instructor in Art
A.B., Yale

STEPHEN STANLEY SOROTA (1936)
Instructor in Physical Education
B.S., Fordham

FRANCIS GORDON SOULE (1970)
Medical Director
A.B., Dartmouth; M.D., F.A.C.P., New York University School of Medicine

ALANSON PERLEY STEVENS, III (1962)
Chairman of Russian Department; Instructor in Russian
B.A., Dartmouth; M.A., Yale

FREDERIC ANNESS STOTT (1951)
Secretary of the Academy
A.B., Amherst

CONSTANCE HALL STROHECKER (1975)
Director of Abbot Alumnae Affairs

HALE STURGES, II (1965)
Chairman of the French Department; Instructor in French
A.B., Harvard; M.A., Middlebury

ELWIN SYKES (1973)
Instructor in English
A.B., Harvard

WILLIAM E. THOMAS (1974)
Chairman of the Music Department; Instructor in Music
B.A., Oberlin; M.F.A., Pennsylvania State University

RONALD DALE THORPE, JR. (1975)
Admissions Officer; Instructor in Classics
B.A., Harvard

JOHN GIBSON TOMLINSON (1966)
Director of Physical Plant
B.S., U.S. Military Academy

SANDRA ANN URIE (1975)
Admissions Officer; Instructor in Russian
A.B., Stanford

MARY L. VAN DUSEN (1973)
Instructor in Remedial Languages
A.B., Wellesley; M.ed., Lesley College

ALEXANDER ZABRISKIE WARREN (1963)
Instructor in Mathematics
A.B., Harvard; M.A.L.S., Wesleyan

THEODORE JOHN WARREN, JR. (AA1972)
Acting School Minister; Instructor in Religion
B.S., Paul Quinn College; B.D., Payne Seminary, Wilberforce University

PHILIP BROWNLIE WELD (1951)
Chairman of the Chemistry Department; Instructor in Chemistry and Physics on the George Peabody Foundation
B.E., Yale; M.S., University of Michigan

JOSEPH BELLEAU WENNIK (1967)
Instructor in German
B.A., Yale; M.A., Middlebury

CHARLES EDUARDO WHITEHEAD (1973)
Instructor in Spanish
A.B., Princeton; A.M., Harvard

LYDIA THOMPSON WHITEHEAD (1974)
House Counselor, Abbey House
B.A., Sarah Lawrence

STEPHEN WHITNEY (1936)
Instructor in French on the Elizabeth Milbank Anderson Foundation
B.A., Yale; M.A., Middlebury

HILDA STROOP WHYTE (AA1967)
Instructor in Physical Science
B.S., Michigan State University; M.S., Tufts University

BARBARA LEE WICKS (1974)
House Counselor, Hall House

STEPHEN B. WICKS (AA1972)
Instructor in Art

*HENRY BOND WILMER, JR. (1970)
Instructor in French and Psychology
B.A., Davidson

JAMES ROBERT WILSON (1967)
Dean of Short Term Institute; Instructor in Chemistry
B.S., Stanford; A.M., Harvard; Ph.D., Harvard

RICHARD H. WILSON, JR. (1975)
Instructor in Music
B.A., Harvard; M.Mus., New England Conservatory of Music

KENNETH KELLY WISE (1966)
Instructor in English
B.A., Purdue University; M.A., Columbia

ANNE LISE WITTEN (AA1955)
Instructor in History and the Social Sciences on Jonathan French Foundation
M.A., University of Frankfurt

JACK SAUL ZUCKER (1970)
Instructor in English
B.A., City College of New York; M.A., New York University

TEACHING FELLOWS

SIDONIE MISKIMIN CLAUSS (1975)
Teaching Fellow in English
B.A., Yale

THOMAS FADDEN CLAUSS, JR. (1975)
Teaching Fellow in English
B.A., Yale

JOSEPH ASHMEAD CLAY (1975)
Teaching Fellow in Music
B.A., Princeton

DIANA PALMER HOYT (1975)
Teaching Fellow in French
B.A., University of Maryland; M.A., University of Maine

ALEXANDER KANDABAROW (1975)
Teaching Fellow in Russian
A.B., Dartmouth

RONALD BRUCE SCHLOSS (1975)
Teaching Fellow in Mathematics
B.S., Stanford; M.S., Stanford

MARTHA DIXON TUCKER (1975)
Teaching Fellow in Mathematics
B.A., Williams

CONSTANCE COPE TURNER (1975)
Teaching Fellow in English
B.A., Princeton

JOHN SCOTT UPTON (1975)
Teaching Fellow in History and the Social Sciences
A.B., Dartmouth

CHRISTOPHER HALE ZAMORE (1975)
Teaching Fellow in English on the Woodrow Wilson National Fellowship Foundation
A.B., Middlebury

FACULTY ASSOCIATES

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Library Cataloguer
B.A., University of Massachusetts; M.L.S., Simmons College

†MARGARET F. COUCH
Reserve Book Librarian
A.B., Wheaton

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Hostess Cooley House
B.A., Smith College

KATHLEEN GONSALVES
Reference Librarian
S.B., Simmons College

ALICE HIRST
Director of Outpatient Department Isham Infirmary-Hospital
R.N., Long Island Hospital

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Associate Archivist

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JEANNETTE GRANGER MUNROE
Hostess at the Underwood Room

THOMAS POOL
Director of Food Services

RUTH MATTHEWS ROEHRIG
Assistant Director Audio Visual Center
B.A., Mt. Holyoke College

ANN P. ROYCE
Assistant in Audio Visual Center

CAROLYN D. SKELTON
School Organist
B.A., Hastings College; MM., New England Conservatory

ELIZABETH RAGLE SOULE
Hostess Cooley House

REBECCA SYKES
Coordinator of Social Activities

MARGARET B. TOWNE
Circulation Librarian
B.S., Salem State College

SALLY SLADE WARNER
Assistant in Music Department; Academy Carillonneur
Ch.M., American Guild of Organists; A.A.G.O., American Guild of Organists

LOUIS J. ZUPPARDI
Radiology Technologist
R.T., R.M.T.

ABBOT ACADEMY EMERITI

HELEN BEAN JUTHE
Instructor in History, Emerita
Altamonte Springs, FL, 1920-1938

HELEN ROBINSON
Instructor in Latin, Emerita
Gloucester, MA, 1918-1945

M. DOROTHY BAKER
Instructor in English, Emerita
Bath, England, 1945-1950

MARY CARPENTER DAKE
Instructor in Physical Education, Emerita
Andover, Mass., 1925-1945

DOROTHEA WILKINSON
Instructor in English, Emerita
Fredericton, N.H., 1939-1953

MARGUERITE CAPEN HEARSEY
Headmistress, Emerita
Wellesley, 1936-1955

ANNA ROTH
Instructor in History, Emerita
Franklin, 1942-1956

KATE FRISKIN
Instructor in Music, Emerita
Cambridge, 1925-1960

MILDRED A. HATCH
Instructor in Latin, Emerita
Chester, N.H., 1946-1961

MARJORIE F. STEVENS
Instructor in Mathematics, Emerita
Andover, 1945-1961

ALICE CURTISS SWEENEY
Instructor in English, Emerita
Andover, 1935-1961

HOPE COOLIDGE
Director of Food and Housing, Emerita
Concord, Mass., 1938-1962

RAYMOND COON
Instructor in Music, Emeritus
Andover, 1946-1962

EDITH TEMPLE JONES
Instructor in French, Emerita
Fairhaven, Vt., 1954-1967

GERMAINE AROSA
Instructor in French, Emerita
Essex, 1945-1969

GARDNER SUTTON
Comptroller, Emeritus
Cambridge, Mass., 1947-1971

PHILLIPS ACADEMY EMERITI

ALICE THACHER WHITNEY
Recorder, Emerita
Andover, 1902-1950

DOUGLAS MANSOR DUNBAR
A.M.
Instructor in Mathematics, German and Bible, Emeritus
Andover, 1942-1958

ROSCOE EDWIN EVERETT DAKE
S.B.
Instructor in Chemistry, Emeritus
Andover, 1921-1961

JOHN KINGSBURY COLBY
A.M.
Instructor in Latin, Emeritus
Andover, 1940-1962

MILES STURDIVANT MALONE
Ph.D.
Instructor in History, Emeritus
Daytona Beach, Fla., 1937-1962

ELIZABETH EADES
A.B.
Director of the Library, Emerita
Williamsburg, Va., 1929-1963

ROGER WOLCOTT HIGGINS
A.M.
Instructor in English, Emeritus
Andover, 1933-1963

EMORY SHELBY BASFORD
A.B.
Instructor in English, Emeritus
Andover, 1929-1964

FLOYD THURSTON HUMPHRIES
A.B.
Instructor in French, Emeritus
Naples, Fla., 1937-1964

JOHN SEDGWICK BARSS
A.M.
Instructor in Physics, Emeritus
Andover, 1923-1965

DONALD MILLER CLARK
M.D.
Medical Director, Emeritus
Peterborough, N.H., 1954-1965

ELBERT COOK WEAVER
A.M.
Instructor in Chemistry, Emeritus
Madison, Conn., 1943-1965

ALEXANDER DUNNETT GIBSON
A.M.
Instructor in French, Emeritus
McIndoe Falls, Vt., 1944-1967

KENNETH SMITH MINARD
A.M.
Assistant Dean of Students and Instructor in History, Emeritus
North Bridgton, Me., 1928-1968

ALFRED GRAHAM BALDWIN
A.B., B.D., D.D.
Instructor in Religion and School Minister, Emeritus
Andover, 1930-1968

DOUGLAS SWAIN BYERS
A.M.
Director of the Robert S. Peabody Foundation and Instructor in Anthropology, Emeritus
Andover, 1933-1968

CORNELIUS GORDON SCHUYLER BANTA
S.B.
Instructor in Mathematics, Emeritus
Andover, 1944-1968

JOHN BROMHAM HAWES
Ed.M.
Instructor in English and Assistant Dean, Emeritus
Weston, Vt., 1933-36, 1939-70

BARTLETT HARDING HAYES, JR.
A.B.
Director of the Addison Gallery of American Art, and Instructor in Art, Emeritus
Andover, 1933-1969

FREDERICK JOHNSON
S.B., Sc.D.
Director of the Robert S. Peabody Foundation and Instructor in Anthropology, Emeritus
Andover, 1936-1969

WALTER GIERASCH
A.B.
Instructor in English, Emeritus
Pacific Grove, Calif., 1941-1970

LEONARD FRANK JAMES
A.M.
Instructor in History, Emeritus
Medomak, Me., 1932-1970

FRANCIS BERTRAND McCARTHY
A.B.
Instructor in English, Emeritus
Andover, 1941-1970

ALSTON HURD CHASE
Ph.D.
Instructor in Greek, Latin, and History, Emeritus
Berwick, Me., 1934-1971

GEORGE KNIGHT SANBORN
S.B.
Instructor in Mathematics and Biology, Emeritus
Kennebunkport, Me., 1928-1972

JAMES HOOPER GREW
D.es L.
Instructor in French, Emeritus
North Andover, 1935-1972

ROBERT WHITTEMORE SIDES
A.B.
Director of Admissions and Instructor in Mathematics and Navigation, Emeritus
Marblehead, 1938-1972

RICHARD VALENTINE HEALY
P.E.
Director of Physical Plant, Emeritus
Winchester, 1956-1972

ALLAN GEORGE GILLINGHAM
Ph.D.
Instructor in Latin and Greek, Emeritus
Corner Brook, Newfoundland, Canada, 1947-1974

ROBERT EDWARD MAYNARD
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WILLIAM RUSSELL BENNETT, JR.
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Registrar, Emeritus
Walpole, Maine, 1950-1974

JAMES RUTHVEN ADRIANCE
A.B.
Assistant to the Headmaster and Instructor in English and Religion, Emeritus
Chapel Hill, N.C., 1934-1975

NORWOOD PENROSE HALLOWELL, JR.
A.B.
Instructor in English and Public Speaking, Emeritus
Andover, 1934-1975

FRANK FREDERICK DiCLEMENTE
S.B.
Instructor in Physical Education, Emeritus
Andover, 1935-1975

HART DAY LEAVITT
A.B.
Instructor in English, Emeritus
Andover, 1936-1975

RICHARD SAWYER PIETERS
A.M.
Instructor in Mathematics, Emeritus
Groton, Ma., 1938-1975

ROBERT A. LEETE
Manager of the Commons, Emeritus
DeLand, Fla., 1940-1975

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Instructor in English, Emeritus
Cherryfield, Me., 1944-1975

C. JANE SULLIVAN
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Director Abbot Alumnae Affairs, Emerita
North Andover, 1938-1975

STATISTICAL INFORMATION for 1975-76

Geographical distribution

Arizona	3
Arkansas	1
California	38
Colorado	12
Connecticut	77
Delaware	1
District of Columbia	14
Florida	12
Georgia	5
Illinois	31
Indiana	6
Iowa	6
Kansas	2
Kentucky	5
Louisiana	3
Maine	16
Maryland	12
Massachusetts	384
Michigan	11
Minnesota	5
Missouri	7
Montana	1
Nebraska	3
New Hampshire	25
New Jersey	46
New York	191
North Carolina	12
Ohio	22
Oklahoma	3
Oregon	5
Pennsylvania	35
Rhode Island	16
South Carolina	2
South Dakota	1
Tennessee	3
Texas	8
Vermont	8
Virginia	11
Washington	1
Wisconsin	2
Africa	1
Algeria	1
Antilles	1
Bangladesh	1
Belgium	1
Canada	5
Chile	1
Dominican Republic	2
Ecuador	1
El Salvador	1
England	4
Germany	3
Greece	1
Hong Kong	1
Italy	1
Japan	3
Kenya	1
Korea	4
Lebanon	1
Malaysia	1
Mexico	2
Morocco	1
Norway	3
Pakistan	1
Panama	1
Puerto Rico	1
Singapore	2
Saudi Arabia	2
Switzerland	1
Thailand	5
Tunisia	1
Turkey	2
Venezuela	5
Virgin Islands	2
West Indies	2
Yugoslavia	1

	Total	Boys	Girls
Seniors	393	269	124
Uppers	303	195	108
Lowers	306	199	107
Juniors	112	74	38
Total Students	1114	737	377

Boarding Students	943
Day Students	171
	1114

"A fantastic place for a serious, conscious person to expand and grow outside the classroom. The chance to learn and profit from students of different backgrounds, ideals and religions is available for those who take the time to do it."

Stanley B. Stolz '75



COLLEGE ADMISSIONS

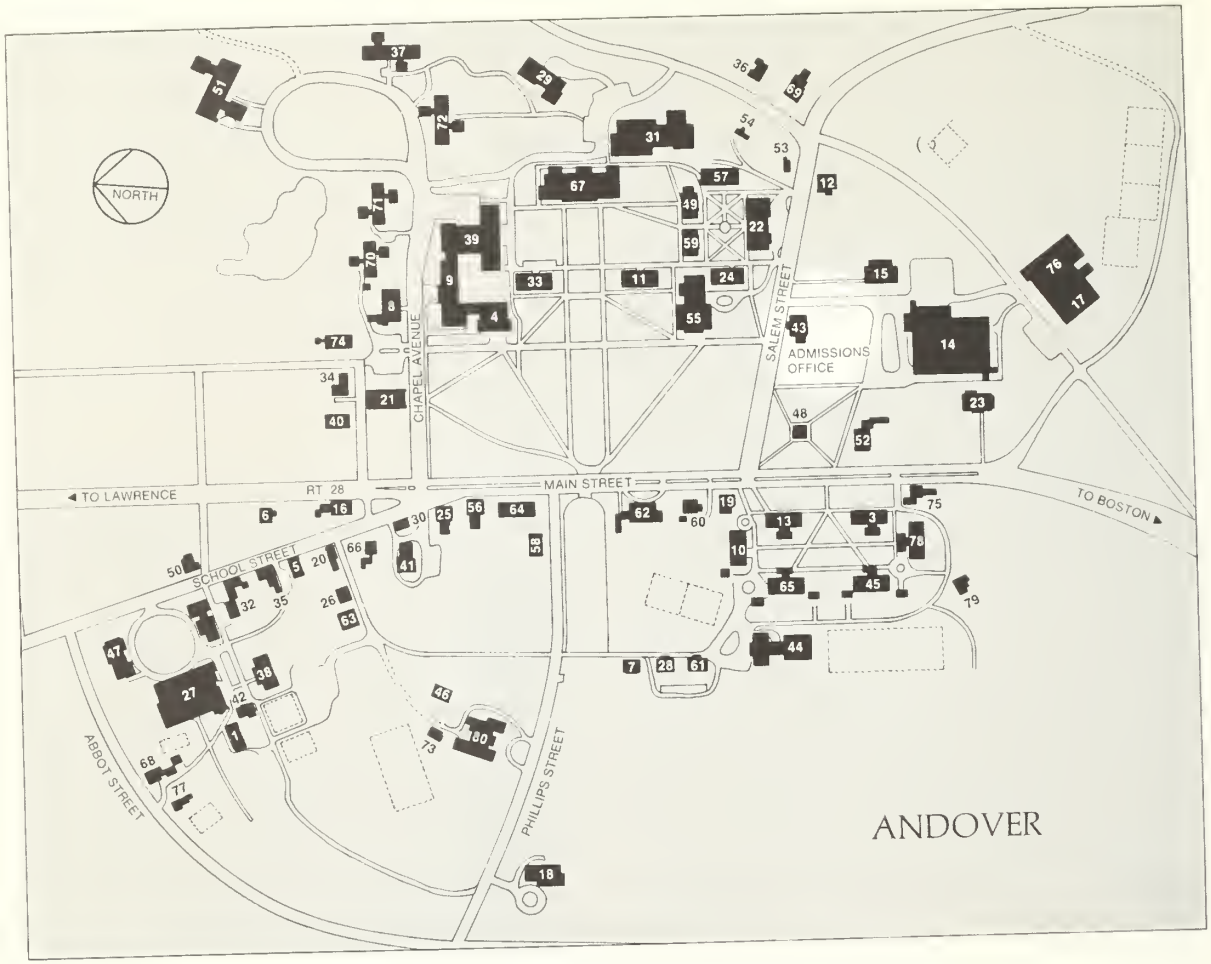
Phillips Academy's long and proud history has been mirrored in the excellent record it has had in college admissions. Although the college admissions picture is entirely different and infinitely more complex now than it was in past decades, our students continue to present a strong record. Competition for admission to selective schools is rigorous and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself in the most satisfying manner. To this end the College Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of schools that makes sense.

Admission to colleges is not based on a student's mere presence in a competitive academic community such as this one, but is based on how well the student has used this experience. Secondary schools can no longer get students into college, but we know that we can prepare them academically and socially. It is certainly true that many of our students do gain entrance into the most selective schools in the country, and that Andover is held in high regard by colleges and universities throughout the country.

The Class of 1976 applied to 176 different colleges and will matriculate next fall in approximately 95 different colleges and universities across the country.

College Matriculations for the Class of 1975

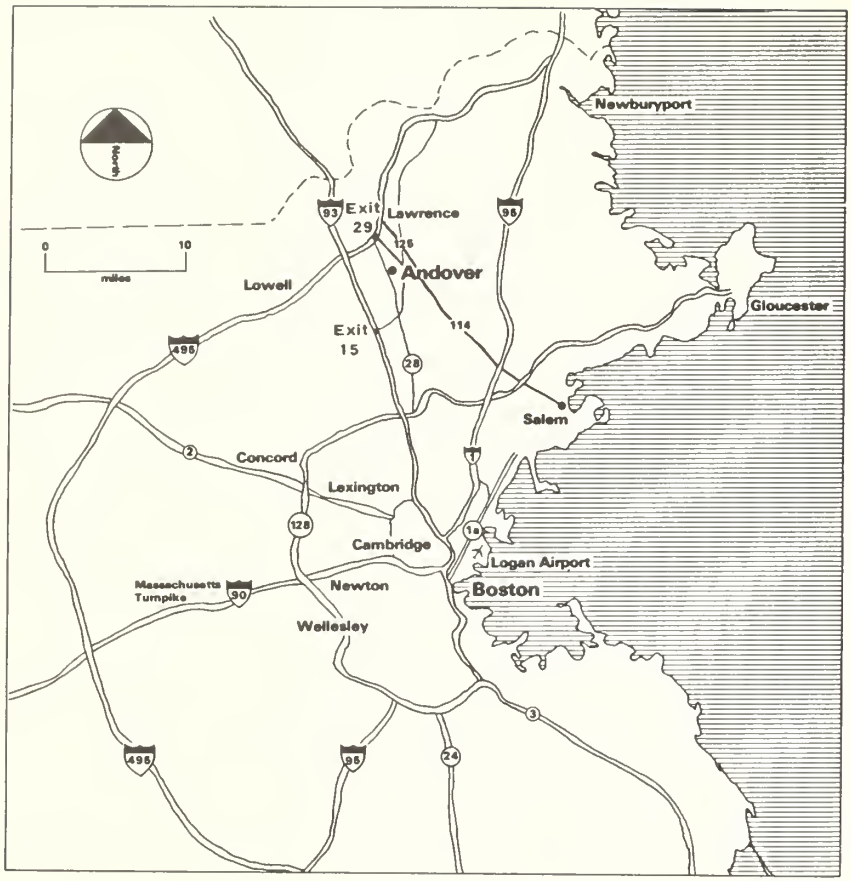
COLLEGE	ADMITTED	MATRICULATED
Acadia, Canada	2	2
Allegheny	4	1
Amherst	15	4
Barnard	8	3
Bates	5	2
Birmingham Southern	1	1
Boston College	9	5
Boston Univ.	17	1
Bowdoin	4	3
Brandeis	13	7
Brown	34	8
Bryn Mawr	4	1
Bucknell	16	6
Univ. of California		
Berkeley	6	1
Santa Barbara	4	3
Santa Cruz	5	3
Carnegie Mellon	5	3
Univ. of Chicago	7	1
Univ. of Cincinnati	1	1
Claremont Men's	6	2
Colby	8	2
Colby Sawyer	3	1
Colgate	13	1
Colorado College	4	3
Univ. of Colorado	7	4
Columbia	19	7
Connecticut College	6	3
Cornell	19	6
Dartmouth	19	9
Denison	5	1
Dickinson	6	2
Duke	10	2
Franklin & Marshall	6	2
Georgetown	19	4
George Washington	4	1
Hamilton	3	2
Harvard	40	33
Holy Cross	1	1
Illinois Institute		
of Technology	2	1
Ithaca	2	1
Johns Hopkins	19	4
Univ. of Kansas	1	1
Kenyon	4	2
Kirkland	5	2
Lafayette	4	1
Lake Forest	3	1
McGill	2	2
Univ. of Mass.	16	5
MIT	7	3
Menlo	3	1
Miami Univ., Ohio	1	1
Univ. of Miami	4	2
Middlebury	10	6
Mills	1	1
Univ. of Minnesota	1	1
Mount Holyoke	7	3
School of the Museum		
of Fine Arts, Boston	1	1
Univ. of New Hampshire	10	2
New York Univ.	5	1
Univ. of North Carolina	12	5
Northwestern	30	11
Notre Dame	2	2
Oberlin	6	3
Ohio Wesleyan	5	3
Univ. of Penn.	43	16
Pitzer	4	2
Pomona	7	2
Princeton	35	11
Quinnipiac	1	1
Radcliffe	8	6
Rhode Island School		
of Design	2	1
Rice	1	1
Univ. of Rochester	19	5
Rollins	1	1
St. Lawrence	12	2
Sarah Lawrence	4	1
Simmons	5	1
Skidmore	9	2
Southern Methodist		
Univ.	1	1
Smith	11	6
Stanford	27	13
Swarthmore	12	3
Univ. of Texas	3	1
Trent, Canada	3	2
Trinity	10	2
Tufts	24	9
Vassar	9	4
Univ. of Vermont	21	3
Univ. of Virginia	6	2
Wake Forest	1	1
Wesleyan	16	7
Wheaton	5	2
Wheelock	2	1
Williams	12	5
William Smith	2	1
Wittenberg	1	1
Yale	36	22


NORTH
TO LAWRENCE
RT 28
MAIN STREET
TO BOSTON
SCHOOL STREET
CHAPEL AVENUE
SALEM STREET
ADMISSIONS OFFICE
ABBOT STREET
PHILLIPS STREET
ANDOVER

INDEX TO BUILDINGS

1 Abbey House*
2 Abbot Hall (Art)
3 Adams Hall*
4 Addison Art Gallery
5 Alumni House
6 America House*
7 Andover Cottage*
8 Andover Inn
9 Arts Center
10 Bancroft Hall*
11 Bartlett Hall*
12 Benner House (Snack Bar)
13 Bishop Hall*
14 Borden and Memorial Gymnasium
15 Bulfinch Hall (English)
16 Carter House*
17 Case Memorial Cage
18 Chapin House*
19 Churchill House*
20 Clement House*
21 Cochran Chapel
22 Commons (Dining Hall)
23 Cooley House
24 Day Hall*
25 Double Brick House*
26 Draper Cottage*
27 Draper Hall*
28 Eaton Cottage*
29 Elbridge Stuart House*
30 Engineering Building
31 Evans Hall (Science)
32 Flagg House*
33 Foxcroft Hall*
34 French Hall*
35 French House*
36 Frost House*
37 Fuess House*
38 G.E. Abbot Gymnasium
39 George Washington Hall
40 Graham House (Psychology)
41 Graves Hall (Music)
42 Hall House*
43 Hardy House **(Admissions Office)**
44 Isham Infirmary
45 Johnson Hall*
46 Junior House*
47 McKeen Building
48 Memorial Bell Tower
49 Morse Hall (Mathematics)
50 Morton House (Alumnae)
51 Nathan Hale House*
52 Newman House*
53 Newton-Hinman House*
54 Nineteen Twenty-four House*
55 Oliver Wendell Holmes Library
56 Park House*
57 Paul Revere Hall*
58 Peabody House
59 Pearson Hall (Classics)
60 Pease House*
61 Pemberton Cottage*
62 Phelps House*
63 Power Plant
64 R.S. Peabody Foundation and Archaeological Museum
65 Rockwell Hall*
66 Samaritan House
67 Samuel Phillips Hall
68 Sherman House*
69 Smith House*
70 Stearns House*
71 Stevens House*
72 Stimson House*
73 Stott Cottage
74 Stowe House*
75 Stuart House
76 Summer Smith Memorial Hockey Rink
77 Sunset Lodge*
78 Taylor Hall*
79 Tucker House*
80 Williams Hall*

*Dormitory



TRAVELING TO ANDOVER

The Trombly Motor Coach Service runs buses to Andover from the Continental Trailways Bus Terminal, 10 Park Square, Boston. At the time this catalog went to press, buses ran approximately every hour, 7:30 a.m.-11:00 p.m., Monday through Saturday, and from 10:30 a.m. to 11:00 p.m. on Sunday. Visitors should call the bus terminal in Boston, 482-6620, for up-to-date information.

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus.

If driving from Logan Airport, go through the Sumner Tunnel and follow Route 93 north signs.

Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
Telephone 475-5903

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
Telephone 475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Rd.,
No. Andover
Telephone 688-1851

INDEX

Academic Calendar 1976-77, 4
Academic Advising 21
Academic Departments 27
Activities 20
Administration and Faculty 65
Admissions 52; Financial aid and Expenses 51; Application deadline 53; Interview schedule 54
Advanced Placement 27
Advisors, academic 21
Alumni Admissions Representatives 54
American History 35
Andover Life 17
Applications for Admission 53; for financial aid 51
Archaeology, study 40; Museum, The Peabody Foundation for Archaeology 40
Architecture 31
Art 28
Art Gallery, The Addison Gallery of American Art 24
Art History 31
Astronomy 42
Athletics 47
Bills, payment of 51
Biology 40
Boston, Man in Society Program in 35 & 45
Buildings, Map of 76
Calendar for Academic Year 1976-77, 4
Campus, Map of 76
Carillon 30
Chemistry 42
Classics 32
Clubs and Activities 20, 42, 43 and 48
Clusters 18
College Admissions 74
College Entrance Examination Board 54
College Matriculations, Class of 1975, 75
Complementary Programs 45
Complementary Schools Project 45
Contents, Table of 3
Counselling and discipline 21
Course of Study 27
Curriculum 27
Daily Schedule 17
Dining facilities and schedule 18
Disciplinary system 21
Dormitory accomodations 18; Map of 76
Drama 29
Early decision 54
Ecology (see Biology)
Emeriti Faculty 71
English Department 33
Examinations for Admission 53
Examinations, Secondary School Admissions 53
Expenses 51
Faculty and administration 65
Fees and expenses 51
Filmmaking 28
Financial Aid 51, application for 51; loans 51
Foreign Languages Department 37
French 37
Furnishings and Equipment 50
Geographical distribution 73
German 38
Grants, Financial aid 51
Greek 32
Health Care 49
Health Insurance 51
History and Social Science 34
History of Phillips Academy 9
Independent work and off-campus projects 27 & 46
Insurance, health 51
Internship, Washington, D.C. 35 & 46
Introduction to Andover 7
Isham Infirmary 51
Italian 39
Language, Modern Foreign 37; Classical 32
Latin 32
Laundry 51
Library, Oliver Wendell Holmes 24
Literature 33
Loans 51
Man and Society Program 35 & 46
Map of the School 76; directions to the school 78
Mathematics 36
Medical care 49
Mexico, Man in Society Program in 35 & 46
Modern Foreign Languages 37
Music, Department 30, private instruction 30
Office of, Admissions 52 & 64; Headmaster 64; of the Dean of the Academy 64; Deans of the Residential clusters 64
Performing Arts 29
Philosophy 40
Photography 28
Physical Education 47
Physical Plant, Map of 76
Physics 42
Publications, student 28 & 33
Psychology 43
Religion and Philosophy 40
Religious Services, Programs and Activities 23

INDEX (Cont.)

Residential Life 8
Russian 38
Scholarships 51
School Year Abroad 46
Science Center, The Evans 41
Science Department 40
Search and Rescue 47
Secondary School Admission Test 53
Senior Class Admissions Candidates 53
Short Term Institutes 45
Social Science 34
Spanish 39
Statistical Information 73
Student Life 17
Student Publications 28 & 33
Summer Session 45
Table of Contents 3
Theatre 29
Trustees 63
Tuition 50; payment schedule 50
Visual Arts 28
Visual Studies 28
Washington Intern Program 35 & 45
Work Program 22

Printed by DBL Associates, Inc.
Printed on Monadnock Vellum Opaque
Designed by Ann M. Parks
Photography by Gordon G. Bensley '43
Richard Graber
Andrew D. Piper '72

Course of Study

77 76 77 76 77 76 77

Phillips Academy

Course of Study
1976-1977

Phillips Academy
Andover, Massachusetts

CONTENTS

2	General Description
12	Archaelogy
12	Art
16	Classics Division
16	Greek
17	Latin
19	Classics
20	English
25	History and the Social Sciences
33	Interdisciplinary
34	Mathematics
38	Modern Foreign Language Division
39	French
43	German
45	Italian
45	Russian
46	Spanish
48	Music
51	Performing Arts Division
52	Theatre
53	Dance
53	Physical Education
84	Psychology
55	Religion and Philosophy
57	Science Division
59	Biology
59	Chemistry
60	Physics
61	Special Science

Course of Study

The curriculum of Phillips Academy combines a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level courses or other elective opportunities. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their attainment. Accelerated sequences and advanced courses offer particularly able and well prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class, if their deficiencies for full membership in it do not exceed a certain number of trimester courses, depending on the grade entered.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic requirements as well as with the possibilities of its flexible academic program. Actual course registration is done at Arena Day prior to the start of each trimester.

Members of the Upper Middle and Senior classes should take care to familiarize themselves with the entrance requirements of the colleges they may wish to enter.

The Trimester Plan

In order to make the program as flexible as possible, the academic year is divided into three equal trimesters. Each trimester is broken up into five two-week cycles. Each two-week cycle consists of eleven class days During the first week of the two-week cycle there are five class days and during the second week there are six class days (including Saturday). Some classes meet four times each week and some meet five times each week. The purpose is to provide greater variety within the curriculum at all levels and opportunity for the substitution of independent work or off-campus projects for regular courses during the term. All departments offer year-long courses as well as term-contained courses, which are completed in one trimester. The diploma requirements are therefore stated in terms of full-year courses or trimester units.

Special Courses in Foreign Languages
Special courses covering the work of two years in one are open to qualified Seniors in French, German, Greek, Italian, Latin, Russian, and Spanish. These *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a *10-20* course as a diploma requirement.

Accelerated Sequences and Advanced Placement
The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Andover students take College Board Advanced Placement Tests in May to establish advanced placement in college courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Biology, Chemistry, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects for Seniors
With the approval of a faculty committee, a Senior may undertake independent work under the supervision of a member of the faculty in place of some portion of the course work normally required. Opportunities, which vary according to the extent to which a student has fulfilled diploma requirements, range from a project in place of a course in any or all terms to the substitution during one entire term of an extensive project carried on during a term away from school or while a student remains at school to carry one or more necessary courses.

Off-Campus Programs and Projects
Off-Campus Programs are becoming increasingly important as schools recognize that many students wish to gain a practical understanding of the problems of contemporary life and to contribute as much as they are able to their solutions. Andover believes that well-conceived programs can demonstrate the need for knowledge and skills and stimulate the desire to learn. Where possible, it attempts to relate practical experience to the concerns of the classroom.

The *Community Service Program* carried on in the nearby cities and towns of the Lowell-Greater Lawrence area, has in recent years involved well over one hundred students from Phillips Academy in voluntary, free-time work in hospitals, schools, and youth guidance and recreation centers. The school also offers several off-campus residential programs.

The *Washington Intern Program* in which Andover joins with Exeter, allows a group of Upper Middlers to spend the Spring Term living to-

gether in Washington and working in the offices of U.S. Senators and Congressmen. Drawing upon several years' experience with a summer residential work-study program in Boston's South End, the school now sends students of the *Man and Society* course to Winter Term work-study programs in Boston and Mexico. See *Social Science 401* and *405*.

In addition to school-sponsored group programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. The school is prepared to make provision for students who can work out apprenticeships in schools, studios, laboratories, or research organizations in their home community or within reach of Andover. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements yet free a block of time during the appropriate term.

School Year Abroad

Students may elect to spend their Upper Middle or Senior Year studying in France or Spain with *School Year Abroad,* originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover as well as the experience of immersion in a foreign culture. Students wishing to participate should consult their academic advisor and the *School Year Abroad* coordinator for guidance in the selection of courses both preceding and subsequent to their year abroad. If there is room, students may arrange an off-campus project for the Fall Trimeste in Spain or the Spring Trimester in France. Details are available through the Dean's Office or the *School Year Abroad* coordinator.

Summer Session

The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to take a six-week *Summer Session* course for Phillips Academy credit may apply to the *Summer Session* if they have made advance individual arrangements with the appropriate department chairman and secured his approval.

Short Term Institutes

The *Andover Short Term Institutes* provide an opportunity for students and teachers from secondary day schools to study intensively one subject during several weeks at Andover. Diploma candidates at Phillips Academy may apply for *Short Term Institutes,* provided that they are able to make individual arangements for credit through the Dean of the Academy.

Complementary Schools Project

The *Complementary Schools Project* sponsors a wide variety of off-campus community internships offered to Phillips Academy students in good standing. Students who wish to participate in a community internship through another school apply to the Assistant Director of the *CSP*, after securing credit arrangements through the Dean of the Academy and approval from their parents, Cluster Deans, and House Counselors.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand both the theory and the practice of the Andover curriculum, and in particular to show the major decisions, and their consequences, which face the students and their Academic Advisors at each stage of the four-year program.

Main Features of the Curriculum

The curriculum of Phillips Academy combines a *required core* of studies that the school believes essential to a liberal education and *elective courses* designed to fit the special needs and interests of the individual student. Its aim is to provide both breadth and depth of experience at the secondary level.

Breadth

Breadth is secured by two somewhat different sets of disciplines. First are requirements leading to sound grounding in English, foreign language, and mathematics. Second are compulsory courses in such main areas of knowledge and experience as history, literature, laboratory science, and the arts.

Depth

Depth in particular fields is gained by choices of sequences which permit, in addition to English, four consecutive years of history or science or mathematics, or advanced study of foreign language, or religion and ethical thought, or the arts.

Flexibility

These possible sequences point to a third main feature of the curriculum — a flexibility sufficient for significant adaptation of the program to the individual student. It is chiefly this flexibility which necessitates careful study of the areas of choice at each stage.

Workload

All new students are advised to carry only a normal program. That is, in the Junior, Lower Middle, and Upper Middle years, the normal program consists of five courses or the equivalent each term. The requirement for the Senior year is four courses or the equivalent of the fourth course — that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor with whom course selection and schedule planning can be worked out. The Academic Advisors meet with students during the Orientation Schedule and also prior to the start of each trimester to review course selections. Within the diploma requirements, programs are determined by the student's long-range needs insofar as they can be foreseen. These needs include college and career plans, when known, strengths and weaknesses as revealed by previous records and aptitude tests, and character and personality development.

A student's House Counselor or Day Student Counselor must approve a student's course selections, too, before the student actually registers for them at Arena Day. Periodically throughout the school year, the House Counselor or Day Student Counselor communicates with parents of those students within his charge as a review of the progress of each student. Late in the Spring, students select courses for the coming year. A copy of these course selections is sent home to parents for their information.

Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents wish to offer.

Arena Day

Students register for their courses and sections in an arena setting before each term. Following meetings with their Academic Advisors, each student makes certain that the desired courses have sections scheduled that fit into a conflict-free, workable daily program. Entrance into the arena is by classes and in numerical order according to a randomly chosen, pre-assigned number. Students are advised to have alternate sections in mind in the event that some of the desired sections are full as enrollment is on a first-come, first-served basis.

Diploma Requirements

The basic diploma requirements are the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover, and the student's being in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's program normally includes nine trimester units of a foreign language, eight of mathematics, a full-year course in United States History plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of studio art, one trimester of music, and six trimesters of English including a two-trimester course of competence in writing and reading and a four-trimester sequence of general literature. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must take a trimester course in physical education in addition to required athletics. Entering Upper Middlers need take only one trimester of either studio

art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a *10-20* course in a foreign language. A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits to be presented for a diploma are for:

Entering Juniors	*54*
Entering Lowers	*51*
Entering Uppers	*48*
Entering Seniors	*48*

Newly Admitted Students

Students entering for their first year are sent placement material including some forms for present teachers to complete and a self-administered diagnostic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Program of Studies form, indicating those courses desired by them. Although the placement material may alter somewhat a student's selections at this time, it is helpful for planning purposes to know the levels that each student thinks he is ready to enter.

Students reaffirm their course selections during the Orientation Schedule with their Academic Advisors.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, *the future consequences* of each course should be noted, for certain choices in one year open the way to later options and may close the door to others.

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

Most Juniors elect *English 10* or *Perception and Expression (English 11)* as one of their courses. In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math — begin sequence (usually *Mathematics 11, 12, 13);*
2. Foreign Language — begin sequence (usually a year-long course at the *10*-level);
3. Elective
4. Elective
5. Elective

[Art, English, Social Science, History, another Math, another language, Music, Performing Arts, Physical Education, Psychology, Science.]

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of

which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during their Lower Middle Year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline:

New Students

1. Math — (usually *Mathematics 13, 24, 25* or *Mathematics* 20);
2. Foreign Language — enter the sequence by placement of the department;
3. English — begin Competence (usually *Comp. (T2), Lit A);*
4. Elective [Art, Classics, Social Science, History, another Math,
5. Elective | another Language, Music, Performing Arts, Physical Education, Psychology, Religion, Science.]

Returning Students

1. Math — continue the sequence (usually *Mathematics 24, 25, 26);*
2. Foreign Language — continue the sequence;
3. English — begin Competence (usually *Comp. (T2), Lit A);*
4. Elective [Art, Classics, Social Science, History, another Math,
5. Elective | another Language, Music, Performing Arts, Psychology, Religion, Science.]

N.B.

Students wishing to take *Social Science 401 (Man and Society; Urban Studies), Social Studies 405 (Man and Society; Studies in Contemporary Mexico),* or to participate in the *Washington Intern Program* should make sure that they will have no year-long courses during their Upper Middle Year. Students wishing to participate in the *School Year Abroad Program* during their Upper Middle Year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year.

UPPER MIDDLE YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall, all take the CEEB Scholastic Aptitude Tests in the Winter, and many take the CEEB Achievement Tests in the Spring of their Upper Middle Year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Most students satisfy their United States History requirement during their Upper Middle Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program

should resemble the following outline:

New Students

1. Math — (usually *Mathematics 30* or *31);*
2. Foreign Language — enter the squence by placement of the department;
3. English — begin Competence (usually *Comp. (T2), Lit A);*
4. Elective
5. Elective

Archaeology, Art, Classics, another English, Social Science, History, another Math, another Language, Music, Performing Arts, Psychology, Religion and Philosophy, Science,

Returning Students

1. Math-continue the sequence (usually *Mathematics 37, 38);*
2. Foreign Language — continue the sequence;
3. English — continue the sequence (usually *Lit B (T2), Lit C);*
4. Elective
5. Elective

Archaeology, Art, Classics, other English, Social Science, History, another Math, another Language, Music, Performing Arts, Psychology, Religion and Philosophy, Science

N.B.
Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year must have no year-long courses during their Senior Year.

SENIOR YEAR
During the Upper Middle Year and the Senior Year, a student must accumulate 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

A Senior must pass a minimum of twelve graded trimester courses during the Senior Year Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses. Many Seniors re-take the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

New Students

1. Math — enter the sequence by placement of the department, if the requirement is not yet satisfied (usually *Mathematics 40);*
2. Foreign Language — enter the sequence by placement of the department if the requirement is not yet satisfied;
3. English — begin Competence (*Comp. (T2), Lit A);*
4. Elective
5. Elective

Archaeology, Art, Classics, another English, Social Science, History, another Math, another Language, a *10-20* Language, Music, Performing Arts, Psychology, Religion and Philosophy, Science.

Returning Students
Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses
Both transferring and dropping courses must be done by obtaining an official transfer slip from your Academic Advisor. This slip is then taken *as soon as possible* to the Scheduling Officer whose office is in George Washington Hall. Transfers into term-contained courses must take place before the sixth meeting of the class. No course may be dropped during the last two weeks of class meetings of the course. Students wishing to drop year-long or T2 courses prior to the normal end of the course may do so only by gaining the approval of a group of five, consisting of: the Department Chairman, the Dean of the Academy, the student's House Counselor, Academic Advisor, and Instructor who act as a review board. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Year-long and T2 courses are considered as long-term commitments.

Attendance
Students are expected to attend **all** academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

During the Year
Students are encouraged to discuss their academic problems and plans with their Instructors, House Counselor, and Academic Advisor. Toward the end of each trimester, students review their program of studies with their Academic Advisor and gain the approval of their House Counselor for their selections. Academic Advisors may deny permission to students to take courses of their selection if the Advisors deem the selections unwise.

In such cases, students may request a consultation with their Academic Advisor and House Counselor. Plans for Independent Projects or Off-Campus Projects should be discussed as early as possible with those members of the faculty who are appropriate as well as the Academic Advisor and the House Counselor.

Continuing students may take a make-up exam in most courses in the event of failure. Spring Term Senior failures may be made-up only following the Commencement Ceremonies.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1976-1977 as follows:

October 23	PSAT/NMSQT *(Preliminary Scholastic Aptitude Test/National Merit Scholarship Qualifying Test*
November 6	SAT/ACH *(Scholastic Aptitude Test/ Achievement Tests)*
December 4	SAT/ACH
January 22	SAT/ACH
May 7	SAT/ACH
May 16-20	AP *(Advanced Placement Tests)*
June 4	SAT/ACH

ey to Course Designation

Courses listed as "0" are year-long courses, for example *French 21-0.* Courses listed as "123" are term-contained but sequential and may be taken separately or in sequence, for example *Art 21-123.* Courses listed as "1", "2" or "3" are term-contained and may be taken only once, for example *Art 10-1, Art 10-2, Art 10-3* indicates that the course is repeated. The designations of 1, 2, and 3 represent the trimesters in which the course is offered: 1 is Fall, 2 is Winter, and 3 is Spring. Some courses require a two-term commitment and are listed as T2, for example *Physics 45-12 (T2)* is a two-term course offered in the Fall and Winter as a sequence with both terms required. Check carefully each listing for any other limitations such as prerequisites, permission of the instructor, etc.

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective.

25—1 **Archaeology**
Four prepared classes. Open to Upper Middlers and Seniors. Limit 20 students. The course explores the methods archaeologists use to reconstruct prehistoric societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Emphasis is placed on two areas of the world where several of these changes are well documented: Mesopotamia and Mesoamerica. Lecture and class discussion are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, *Visual Studies*, covers a broad range of material, is open to students of all abilities and experience, and is a prerequisite to almost all elective courses in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in many colleges and Art Schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work in May. *Visual Studies* in combination with two other trimester courses is adequate preparation for this opportunity. Those interested in Advanced Placement should consult with the Chairman early in the Upper Middle or Senior Year about choice of courses and preparation of the portfolio.

Introductory Studio Courses

10—1 **Visual Studies**
10—2 Five class periods and three hours preparation. In its emphasis on observation,
10—3 interpretation, and organization, the basic course is designed to supply an understanding of contemporary surroundings. Along with discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—123 **Introductory Ceramics**
Pass/Fail. Four classes per week plus an evening studio. Limit ot ten students. Basic techniques of hand-building, wheel-throwing, and glazing. Emphasis on

the sculptural as well as the functional possibilities of clay. At least one raku firing each term, or a similar special project.

12—1 **Introductory Photography**
12—2 Prerequisite: *Visual Studies (Art 10)*. The course covers fundamentals of black
12—3 and white photography. Technique and control are emphasized for clarity, but content is the first consideration along with the development of a personal direction in the medium. This course is a prerequisite for all other still photography courses. Students are expected to provide their own cameras.

13—1 **Art Studio**
13—2 Pass/Fail. A Studio open to all classes which strives for flexibility to suit the
13—3 varied art interests of the students. There is either an introduction for some people to drawing, painting, and printing, or an opportunity for those more experienced to develop the abilities and ideas they already have achieved. There is a balance between structured classes and free creative periods. *Visual Studies (Art 10)* is preferred but not required. Limit of 12.

termediate Studio Courses

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies (Art 10)* is a prerequisite for all intermediate courses.

20—123 **Drawing**
Prerequisite: *Visual Studies (Art 10)*. A course designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media.

21—123 **Animation**
Prerequisite: *Visual Studies (Art 10)*. An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. Given in collaboration with the Music Department, the course may interest either the art student who wishes to explore the visual possibilities of the medium or the music student who wishes to find a vehicle for an original composition.

22—123 **Television Videotape**
Prerequisite: *Visual Studies (Art 10)*. A term-contained sequence in the use of videotape, both for group productions and for individual projects. Students may choose to work on video-plays, documentary, or abstract imagery. All work is done on black and white ½-inch videotape.

23—123 **Two-Dimensional Design**
Prerequisite: *Visual Studies (Art 10)*. The course deals with one's ability to manipulate those elements most associated with the picture: color, line, shape, texture, and composition of flat materials. Work includes: 1) color — free studies and collages dealing with the structural and expressive nature of color; 2) drawing — exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground — expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design.

24—123 **Three-Dimensional Design**
Prerequisite: *Visual Studies (Art 10)*. Woodworking, welding, furniture design, toy-making, sculpture — all these activities share principles of design which can be more broadly applied to architecture, city and regional planning. The course introduces the wood and metal shops via a series of assigned projects, each of which demonstrates a basic set of design principles.

25—123 **Intermediate Ceramics**
Prerequisite: *Visual Studies (Art 10)*. *Introductory Ceramics (Art 11)* preferred but not required. The course stresses combining techniques and the development of basic skills toward new forms. Participation in glaze preparation and firings.

26—123 **Intermediate Photography**
Prerequisite: *Visual Studies (Art 10)* and *Introductory Photography (Art 12)*. Two class hours plus four hours of laboratory work per week, offering students the chance to pursue a project of their own choice. The course should be taken with an instructor different from the one the student studied with in *Introductory Photography (Art 12)*.

Advanced Studio Courses

Visual Studies (Art 10) is a prerequisite for all advanced courses.

300—123 **Graphics and Photography**
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12)*. Applying photography to graphic arts, particularly through photo-silkscreen. Individual experimentation is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques.

301—123 **Studio Photography**
Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12)*. Limited to ten students. Portraiture and Fashion: controlled lighting with photo flood and studio strobes. Large format cameras (2¼ and 4 x 5) are supplied for this course. Meets Wednesdays from 1:30 to 5:30 for shootings; subjects may be professional models from Boston or subjects of the student's choice.

302—123 **Painting**
Prerequisite: *Visual Studies (Art 10)*. An introduction to the basic concepts and techniques of painting in oil, acrylics, and watercolors. In preparation for the serious work of each student in that individual's selected field of interest, there are class discussions, demonstrations, and appropriately assigned problems in design. It is suggested that one or two of the intermediate courses — *Problems in Art History (Art History 27)*, *Two-Dimensional Design (Art 23)*, or *Drawing (Art 20)* – are helpful prior to painting.

303—123 **Filmmaking**
Prerequisite: *Visual Studies (Art 10)*. Students are encouraged to develop their own projects. Some students may choose to continue with work begun in *Animation (Art 21)* or *Television (Art 22)* (which are *not*, however, prerequisites for *Filmmaking)*. Others may choose to do documentary or narrative projects, or 'abstract' movies. Cameras, editing equipment, etc., are provided.

304—123 **Advanced Ceramics**
Prerequisite: *Visual Studies (Art 10)*. For those who are seriously interested in the total operation from design to execution. Hand-building, wheel-throwing, glazemaking (and some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips.

305—123 **Print Shop**
Prerequisite: *Visual Studies (Art 10)*. Relief Painting: designing, cutting, and printing linoleum and woodblocks in editions. Silkscreen: making stencils for the screen, experimenting with color, and printing imaginative compositions as well as message-oriented posters. Intaglio: starting with drypoint and learning the processes of etching and printing in a workshop atmosphere.

306—0 **Advanced Photography**
306—12 Prerequisite: *Visual Studies (Art 10)* and *Introductory Photography (Art 12)*.
306—13 Students must enroll for the Fall Term and at least one other term. Full-year participation is encouraged. This course is for students who would like to survey a wide variety of photographic styles, i.e., natural landscape, social landscape, commercial photography, etc. Advanced darkroom instruction helps students to better control negative developing and printing technique. Individual projects are considered.

307—0 **Documentary Photography**
307—12 Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).*
307—13 Students must enroll for the Fall Term and at least one other term. Full-year participation is encouraged. While some advanced darkroom instruction is offered, the emphasis of this course is the "documentary style," i.e., photographing people and their environments. Methods for producing essays and picture stories are explored. The works of many photographers are viewed and discussed. Individual projects are encouraged, and assignments are given on request.

08 — 123 **Sculpture**
Prerequisite: *Visual Studies (Art 10).* Offers an opportunity to work in practically every material available to the sculptor today, including wood, stone, metal, plastics, plaster, and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes include the "avocado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Addison Gallery, a standing steel figure by Jamie Morgan, '73, which was on display in the Headmaster's Office and others. Individual criticism is stressed.

309—123 **Kinetics**
Prerequisite: *Visual Studies (Art 10). Three-Dimensional Design (Art 24)* is recommended. A search for the aesthetics of movement. Individual inventiveness is stressed as students pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course.

310—123 **Architecture**
Prerequisite: *Visual Studies (Art 10).* For Uppers and Seniors. A design course based on previous work in *Visual Studies (Art 10)* and/or *Three-Dimensional Design (Art 24)* which relates to the basic elements of surface and volume to the design of shelter, the efficient combination of human functions, and the organization of construction. At least one term involves large-scale projects constructed in the woodworking shop. Examples from recent years include the Search and Rescue climbing tower near Rabbit Pond and the playground at a local elementary school.

311—123 **Contemporary Communications**
Four prepared class periods. The course examines some of the bases of communication between and among people. Material includes fiction, nonfiction, poetry, drama, motion pictures, and the visual arts. Prerequisites: Successful completion of a course in art, music, or theatre. At least one term the course engages in a large group project aimed at public presentation. (Mr. Owen and Mr. Lloyd).

rt History

Art History 27—1 27—2 27—3 **Problems in Art History**
Prerequisite: *Visual Studies (Art 10).* This course is about the ideas that underlie the making of art, and about the art itself. One goal of the course is to provide the student with a working vocabulary in order to approach the visual arts; the other goal is to acquaint the student with the major stylistic movements in Western Art, from Classical to Modern times. For example, the class may take a painting or building from the Renaissance and analyze how its style reflects the social, political, aesthetic, and spiritual ideas of Renaissance Italy, and also analyze it in strictly formal terms of line, tone, and color. This course is recommended as a precursor to *History 54, 55, 56,* and *Art History 57.* Occasional trips to Boston Museums are taken.

History 54—1 **Art and Architecture in Antiquity and the Middle Ages.**
Four prepared class periods. For Uppers and Seniors. This course is an introduction to Western art from Archaic Greece to fourteenth century Italy. Focusing

primarily on architecture and sculpture, it covers major trends in Greek, Roman, Byzantine, Romanesque, and Gothic art. It stresses the basic vocabulary, fundamental questions, and analytical methods of the art historian. (Mr. Sewall)

History 55—2 **Art and Architecture in the Renaissance and Baroque**
Four prepared class periods. For Uppers and Seniors. It is strongly suggested that students planning to take *History 55* have completed *History 54*. This course covers European art from the Early Renaissance in Florence and Flanders to the Neoclassical movement of the late eighteenth century. (Mr. Sewall).

History 56—3 **Art and Architecture Since the French Revolution**
Four prepared class periods. For Uppers and Seniors. It is strongly suggested that students planning to take *History 56* have completed *History 55*. This course covers the diverse movements of "modern art" in the nineteenth and twentieth century. It includes occasional visits to museums in Boston and New York. (Mr. Sewall)

Art History 57—3 **American Art Reveals American Life**
Prerequisite: *Visual Studies (Art 10)*. Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course takes the opportunity of the Bicentennial to look closely at the primary source material in the collection of the Addison Gallery of American Art. Providing the chance to study original works of art, the course uses the paintings, sculpture, graphics, and ship models in the Addison's collection as a basis for a survey of the arts in America. In addition to assigned reading each student works on an independent project object in the museum's collection.

History 54, History 55, and either History 56 or Art History 57 when taken consecutively combine to form a full year's preparation for the Advanced Placement Examination in Art History.

The Classics

The foreign language diploma requirement is competence at the level of the third year of a modern or ancient language. Such competence in Latin or Greek is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh trimester, by passing a special examination set by the department.

The Department of Classics offers students through the study of the Greek and Latin languages a direct entry into Greek literature, which is still unsurpassed in quality, and into Latin, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the clue to its meaning.

Latin has traditionally been the first language of the two to be studied in school. Greek, as a first language, however, is no more difficult than Latin. The Greek alphabet is easily mastered in the first two class meetings and students quickly discover that the language has poetic and expressive quality and content which stimulate imagination and understanding of man's political and intellectual development.

Greek Courses

10—0 **Greek**
Five prepared class periods. The course prepares students for the reading of Greek literature. The necessary training is given in basic vocabulary, forms, and

syntax. Frequent practice together in class with other students and the teacher in sight reading of characteristic passages of Greek literature provides an introduction into the bases of Greek civilization and culture. Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Crosby and Schaeffer's *Introduction to Greek* (Allyn and Bacon) are used.

10-20—0 **Greek**
Five prepared class periods. The course is open to Seniors and Upper Middlers. It covers in one year the essential material of *Greek 10* and *Greek 20*. The texts are Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Xenophon's *Anabasis*, ed. Mather and Hewitt (University of Oklahoma Press).

13—1 **Introduction to Greek**
13—3 Four prepared class periods. The course is for students whose curiosity for the Greek language and civilization has been aroused by their studies in Latin or the modern languages (including English). It provides an excellent introduction into the intricacies and subtleties of a highly inflected language. The student is treated to an inside preview of a body of literature which has been the groundwork for the Western World's literature of today. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 **Greek**
Five prepared class periods. The second year is occupied with selections from Xenophon's works and with some of the philosophy of Plato. Prose composition in Attic Greek is studied, the grammar is reviewed, and there is work in sight translation. The texts are Xenophon's *Anabasis*, ed. Mather and Hewitt (University of Oklahoma Press) and selections from Plato's dialogues in *The Martyrdom of Socrates*, ed. Doherty (Oxford).

30—0 **Greek**
Four prepared class periods. Selected books of the *Iliad* and the *Odyssey* and a play of Euripides examine the nature of tragedy, heroism, and self-discovery. The texts are Benner's *Selections from Homer's Iliad* (Naiburg), Homer's *Odyssey I-XII*, ed. Standford (St. Martin's Press), and Euripedes' *Hecuba*, ed. Hadley (Cambridge.)

40—123 **Greek**
Four prepared class periods. In the Fall Term ancient concepts of justice and morality are examined through the works of Herodotus and Thucydides. Human tragedy is explored in a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets. The texts are Chase and Phillips' *A New Greek Reader* (Harvard University Press), Euripides' *Medea*, ed. Elliott (Oxford), Sophocles' *Oedipus Tyrannus*, ed. Jebb (Cambridge), and Campbell's *Greek Lyric Poetry* (St. Martin's Press).

Latin Courses

10—0 **Latin**
Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms, and syntax of the language along with frequent practice in sight reading. The student is introduced to the general outline of Roman history and civilization and improves his English vocabulary through the study of Latin derivatives. The text is Chase's *A New Introduction to Latin*, (Independent School Press).

10-20—0 **Latin**
Five prepared class periods. For Upper Middlers and Seniors. A year-long accelerated introductory course covering two years in one. Those who pass the course successfully are given credit for two years of Latin. The course is reserved for students who give evidence of high ability. Texts are the same as those for *Latin 10* and *Latin 20*.

11—0 **Latin**
Five prepared class periods. The course begins Winter Term. Its content is the same as *Latin 10*, taught at a more gradual pace to allow time to resolve specific linguistic problems. Students who find unusual difficulty in mastering a modern foreign language are encouraged to discuss their eligibility for the course with their teacher, advisor, or with the Chairman of the Department of Classics. The text is Buehner and Ambrose's *Preparatory Latin*, (Independent School Press).

13—1 **Introduction to Latin**
13—2 Four prepared class periods. The course is for students seeking an introduction to the Latin language, or those whose studies in other languages (including English) have aroused their curiosity about grammar, syntax, and vocabulary. It offers special profit and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so.

15—0 **Latin**
Five prepared class periods. For new students who have been exposed to Latin but who are not fully qualified for *Latin 20*. Students may be advanced from this course to *Latin 20* or *Latin 30* upon recommendation of the department. Texts are the same as those for *Latin 10* and *Latin 20*.

20—0 **Latin**
Five prepared class periods. During the first term, the course gives a thorough review of the fundamentals of Latin grammar and begins the reading of Caesar. Caesar's account of his campaigns provides for the student insight into the problems of political ambition and international intrigue. These ideas are developed and compared in additional readings from Nepos and Livy. There is practice in sight translation and prose composition. The texts are Buehner's *An Intermediate Latin Reader* (Independent School Press) and Colby's *Review Latin Grammar* (Independent School Press).

21—0 **Latin**
Five prepared class periods. The course continues the work begun in *Latin 11*.

30—123 **Latin**
Four prepared class periods. Each term is the prerequisite for the term which follows it. Through the writings of Cicero and a variety of other authors, the course teaches students to read Latin prose with an increasing ease. It presents a picture of Cicero's life and times and compares the political unrest and maneuvering of his time with that of our own. The literary importance of Cicero as the creator of a prose style which influenced the literature of Europe for centuries is assessed. In the Spring Term the student is introduced to Roman poetry through readings in Vergil's *Aeneid*. The student will begin to understand how Vergil, as heir to the Homeric tradition, gave to epic and to Western poetry in the generations that followed him its definitive form. The text is Gillingham and Barrett's *Latin: Our Living Heritage, Book III* (Charles E. Merrill Books).

31—0 **Latin**
Five prepared class periods. The course follows the same outline as *Latin 30*. It is open to students who have completed *Latin 21* and to students in their first year at Phillips Academy.

40—123 **Latin**
Four prepared class periods. Each term is the prerequisite for the term which follows it. By a study of selections from the *Aeneid* and other Latin poetry, the course introduces students to both the forms and content of classical poetry. Students become familiar with the symbolic character of the Western poetic tradition in Vergil, its source. This use of symbolism reflects the poet's unsurpassed

treatment of the human condition and destiny. The text is *The Aeneid of Vergil,* ed. Knapp (Scott, Foresman and Company).

50—123 **Latin**
Four prepared class periods, one unprepared period devoted to sight work. The course includes preparation for the Latin Advanced Placement Examination. In the Fall Term, selections from Livy's *Histories* give students insight into the foundations of some of the Western World's ideas of government and law. The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a Twentieth Century psychiatrist as "a type of the perfectly integrated personality." Selections from Tacitus' *Annals* are read as a contrast because of their studied depiction of human excess in tyranny and degradation.

lassics Courses

11—3 **Etymology**
Four prepared class periods. For Juniors. A practical method of strengthening conversational literary, and scientific vocabulary by the study of stems, prefixes, and suffixes in English words, especially as derived from Greek and Latin, increasing accuracy of definition and perception of nuances of meaning.

21—1 **Classical Civilization: Greece**
21—3 Four prepared class periods. For Juniors and Lower Middlers. The course focuses on the height of ancient Greek civilization, the foundations of its culture, and its unique experience in political democracy. In dealing with this pinnacle of civilization, the course provides insight into the realities of political democracy today by suggesting how our society has arrived at the point it is at now and hinting at where we may be headed. The texts are Kitto's *The Greeks* (Penguin) and *The Portable Greek Reader,* ed. Auden (Viking).

22—2 **Classical Civilization: Rome**
22—3 Four prepared class periods. For Juniors and Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The development of the concepts of politics, law, and empire as we know them today are discussed. The course challenges the student to consider the meaning of the Roman experience in the results of the "Roman Peace" as well as in its "Decline and Fall." The texts are Starr's *The Ancient Romans* (Oxford), Barrow's *The Romans* (Penguin), and *The Portable Roman Reader,* ed. Davenport (Viking).

30—123 **Epic Poetry**
Four prepared class periods. Each term is a prerequisite for the following term. This course focuses on western epic poetry: the poems are delightful, unique literary monuments of great importance in the development of western literature and, they are a fascinating means of learning about Indo-European culture, human psychology, and man's creative history. Fall Term deals primarily with cultural development and psychology, with a variety of readings, especially from Frazer's *Golden Bough.* Winter and Spring Terms are devoted to the epics themselves as literature and as evidence of the Fall Term's material. *Gilgamesh,* the *Iliad* and *Odyssey,* the *Song of Roland, Beowulf* and Tolkien's *Lord of the Rings* are read, as well as excerpts from other European epics.

31—1 **Etymology**
31—2 Four prepared class periods. For Lower Middlers, Upper Middlers, and Seniors. Training in the interpretation of English words by systematic analysis of elements derived from Greek, Latin and other Indo-European languages. Exercises expand vocabulary and develop precision of expression and understanding.

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course),* and to complete the *Literature Sequence* through *Literature C.* For those entering Seniors who must take the *Competence Course,* the requirement is reduced by the appropriate number of trimesters.

The English Department also offers courses at the following levels: *English 10* and *Perception and Expression (English 11)* for Juniors; *English as a Second Language (English 13)* for some foreign students; specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

JUNIORS

Students entering the Junior Class are strongly urged to take the normal Junior course, *English 10* or *Perception and Expression (English 11)* although they may elect to take no English at all.

LOWER MIDDLERS AND UPPER MIDDLERS

Entering Lower Middlers and Upper Middlers should take the *Competence Course.* They will be advanced to the *Literature Sequence* as soon as they establish competence.

SENIORS

Entering Seniors take the *Competence Course* in the Fall Term. If an entering Senior is deemed competent early in the Fall Term, he may apply to the Department Chairman for permission to waive the literature requirement and enroll in one of the specialized courses.

Introductory Courses

10—0 **English**

This course is the Department's standard course for Juniors. It is a year-long offering and must be taken for all three trimesters if the student wishes to earn credit for the course. Throughout the year there is emphasis on sentence structure, paragraphing, and articulate expression in speech and writing. The student learns to observe and to listen; to keep a journal; and to read literature sensitively and intelligently. In the Fall Term each class studies myth, using Homer's *Odyssey;* in the Winter Term the focus is on literature of observation, like Twain's *Life on the Mississippi;* in the Spring Term at least one Shakespeare play is read.

11—0 **Perception and Expression**

This course, open only to Juniors, has four prepared periods and one unprepared period. Taught jointly by members of the English and Art Departments, the course, which may be taken in place of *English 10,* seeks to involve the student in a number of experiences intended to increase awareness of the world around us. In addition to reading, writing, and listening, students work with tape recorder and video tape, still and motion camera, and acting, involving individual and group performances in various media. This course exempts students from the photography half of *Visual Studies (Art 10).*

13—123 **English as a Second Language**
The course acquaints the foreign student with the idiom and structure of English. This class is open to upperclassmen.

14—123 **Basic Skills**
This course is for Lower Middlers, Upper Middlers, and Seniors who require a survey of grammar, sentence structure, and other basic verbal skills before they take *Competence*. The only students admitted to the course are those assigned to it by the Department.

16 — 23 **Language Skills (T2)** (a two-term commitment)
This course is designed for those students, primarily Juniors, who need supplementary help in overcoming weaknesses in reading, writing, spelling, and vocabulary. By studying the structure of words and sentences, and by practicing patterns of pronunciation, students can learn to understand language better and use it more effectively. Specific assignments are geared to the needs of each student. Open only to students who have permission of the Chairman of the English Department.
Juniors are also eligible to enroll in Etymology, which is described under Classics 11.

Required Sequence Courses (2 years)

	Fall	Winter	Spring
First year of sequence	Competence (T2)		Lit A
Second year	Lit B (T2)		Lit C

Competence Course (T2) (a two-term commitment)
The course is designed to teach the basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. It encourages the acquisition of important reading skills in conjunction with the study of writing. Passages that have been composed by skillful writers are evaluated for their particular strengths: organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas.

Literature Sequence
The texts listed comprise about half the reading in each course, the remaining texts to be chosen by the individual instructor of each section.

Lit A
A one-term introductory course to the *B* and *C* courses in which the student reads in depth poems and short stories of the Twentieth Century. Composition stresses the analysis of these poems and stories.

Core Texts: *Pocket Book of Modern Verse*, ed. Oscar Williams
50 Great Short Stories, ed. Crane (Bantam)

Lit B (T2)
A choice among three courses in English and American literature 1660-1900. Each course is a two-term unit given in the Fall and Winter Trimesters.

Lit B-I (T2) (a two-term commitment)
The prose and poetry of the late Seventeenth and Eighteenth Centuries, with emphasis on satire.
Core Texts: *Fall Term*
Swift, *Gulliver's Travels*
Pope, selected poems
Winter Term
Fielding, *Joseph Andrews*
Blake, selected poems; or selections from *Eighteenth Century Minor Poets*

Lit B-II (T2) (a two-term commitment)
Romantic literature in England and the United States.
Core Texts: *Fall Term*
Keats
Bronte, *Wuthering Heights*
Winter Term
Whitman
Melville, *Moby Dick;* or Hawthorne's short stories

Lit B-III (T2) (a two-term commitment)
English and American literature of the later Nineteenth Century
Core Texts: *Fall Term*
Hardy, *Mayor of Casterbridge;* or Dickens, *Hard Times*
Browning
Winter Term
Twain, *Huckleberry Finn* or *Pudd'nhead Wilson*
Dickinson, *Final Harvest*

Lit C
A choice among three courses centering on three plays of Shakespeare and some related works. Each course is one trimester given in the Spring Term. Each section focuses on a theme chosen by the individual instructor.

Lit C-I: *Macbeth*
Lit C-II: *Hamlet*
Lit C-III: *Othello*

Elective Courses

Only courses with sufficient enrollment will be given.

18—1 **Efficient Reading**
18—2 Primarily for Upper Middlers and Seniors. A course for increasing reading speed and comprehension, using the *Harvard Reading Course* with supporting exercises in writing and vocabulary.

Specialized Courses

Specialized Courses are open to students who have successfully completed *Literature A, B,* and *C*. Courses numbered in the *500's* are more intensive and demanding than those numbered in the *400's*. Each course has four prepared class periods a week, unless specifically stated otherwise.

401—123 **Philosophy and Literature**
As a bridge between *Lit C* and the *500* courses, this course extracts philosophical statements contained in literature. Fall Term concentrates on the definition of truth; Winter Term, beauty; Spring Term, goodness. The readings contain statements from philosophers as well as poets and novelists. (Mrs. Bugbee)

402—123 **Great Writers Before 1850**
This course is intended primarily for students who have taken Lit. B-III and want to increase their knowledge of writers prior to 1850. Each term students study three writers and do an individual project on a fourth. Students together with the instructor choose writers from the following: Homer, Sophocles, Chaucer, Shakespeare, Donne, Pope, Fielding, Keats, and Austen. (Mr. Edmonds)

403—12 **Introduction to Writing (T2)** (a two-term commitment)
An introductory course to the writing of original short stories, informal essays, and poetry. After examining examples of the genres mentioned, the student tries his hand at one or more of these forms. The second term, for which the first is a prerequisite, is devoted largely to reading works in progress. With written permission from the instructor, a student may take this course before he has completed the normal *Competence* and *Literature Sequence* requirements. (Mr. Owen)

404—1 **Hemingway: The Man and his Work**
A consideration of Hemingway as a craftsman and a moralist is the primary concern of the course. Some attempt is made to define the relationship between the artist and his work: how a writer makes books, and how his books make him. Both short stories and novels are read.

405—123 **Afro-American Thought and Letters 1890-1960**
The chief concern of this course is the black writer's conception of America and of his and his race's role in it. The conception is studied in writers from Dunbar to Kelley. The major focus of the course in the Fall is the pre-Renaissance tension between Washington and Dubois, in the Winter the Harlem Renaissance is studied, and in the Spring the works of such great writers as Wright, Ellison, and Baldwin are studied. The method of this course is at once thematic and chronological. A constant effort is made to place the literature in social and historical perspective. (Mr. Sykes)

500—12 **James Joyce**
The first term is devoted to *Dubliners, A Portrait of the Artist,* and *Stephen Hero,* and Ellmann's *James Joyce;* the second to *Ulysees* and *Finnegans Wake* in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Mr. Brown)

501—12 **Man and God**
The course considers man's search for meaning in what frequently seems to be an inexplicable world. Readings include *The Oedipus Cycle,* Sophocles; *Hamlet,* Shakespeare; *Rosencrantz and Guildenstern Are Dead,* Stoppard; *Long Day's Journey into Night,* O'Neill; *J. B.,* MacLeish; *A Portrait of the Artist as a Young Man,* Joyce; *The Fixer,* Malamud; *The Idiot,* Dostoevski; *The Trial,* Kalfka; *Tiny Alice,* Albee; *The Birthday Party,* Pinter; *The Sound and the Fury,* Faulkner; *Short Stories,* Salinger; *Rabbit Run,* Updike; *Wiseblood,* O'Connor. (Miss St. Pierre)

508—123 **Modern Playwrights**
The development of drama in Europe from Pirandello to Pinter (Fall), in America from O'Neill to Albee (Winter), and new work by living playwrights in Europe and America (Spring). Enrollment in the Fall or Winter Term is normally a prerequisite for enrollment in the Spring Term. (Mr. Kirkland)

509—123 **Shakespeare: The Man, The Times, The Theater, The Plays**
Each term a cycle of related plays is read, with biographical and historical material. During the course of the year, the class reads representative tragedies, histories, and comedies.

511—123 **Writers in Depth**
By reading the major works of a significant writer as well as biographical and critical material, members of this seminar explore questions such as these: What themes recur in the writer's work? What style does the writer employ? How autobiographical are the writer's works? What judgments have the critics rendered? How valid are these criticisms? O'Neill, Yeats, Faulkner, Lawrence, and Fitzgerald are among those writers recently studied. (Mr. Price)

513—123 **Novel and Drama Seminar**
Most of the course is concerned with the major works of modern literature, principally the works of James, Faulkner, Grass, Barth, Nabokov, Borges, O'Neill, Eliot, Brecht, Kopit, Williams, Storey, and Pinter. Students have the opportunity to study the "world" of each writer and to compare it with that of the others. In order that they may have a basis of comparision with the writers of the past, they also study *The Brothers Karamazov* and *King Lear*. Class periods are devoted to seminar discussions, exercises in logic and argument, dramatic readings, drama games, and critiques of student analytical and creative work. (Mr. Wise)

514—123 **Creative Writing**
The course combines creative writing with the study of literature in depth. The reading consists of novels, collections of short stories, collections of poems, usually chosen from great works of the 19th and 20th centuries. After the Fall Term, reading is chosen by the students in collaboration with the teacher. Class periods are devoted to workshops in which student writings are discussed and to seminar discussions of literary works. Normally the first term is devoted to fiction, the second to drama, the third to poetry, though fiction is stressed more than drama and categories tend to overlap. An individual may, if there is sufficient cause, choose to do an individual project rather than work in an area he finds uncomfortable, but all students are required to try all three major forms.

517—123 **American Writers of the Twentieth Century**
A thematic and comparative study of the novel and drama in America from 1900 to the present. Representative authors are Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, and Agee. (Dr. Goodyear)

518—3 **Milton and Spenser**
Students read shorter works of these two masters in preparation for study, in the second half of the term, of either Spenser's *The Faerie Queene* or Milton's *Paradise Lost*. The class meets in tutorials when reading the epics. (Mr. Kalkstein)

527—2 **Chaucer and his Age**
The wit, poetry, and genius of the later Middle Ages and Renaissance, as seen in Chaucer and medieval drama. (Mr. Regan)

528—3 **The Metaphysical Poets, and After**
A study of the line of wit and paradox in such seventeenth century poets as John Donne, George Herbert, and Andrew Marvell; the nineteenth century re-emergence of the metaphysical strain in the poetry of Gerard Manley Hopkins; and its continuation into the twentieth century. Background readings are assigned in the Bible, Plato, and classical mythology. (Mr. Regan)

The following Theatre courses, which are related to English studies, have no prerequisites: Theatre 22 (Public Speaking), Theatre 28 (Shakespearean Workshop), and Theatre 29 (Playwriting). These may be found under Performing Arts, p.51.

Other courses related to English are Art 311 (Contemporary Communications), Classics 30 (Epic Poetry), Russian Lit 500 and Soviet Lit 501, (Russian Lit and Soviet Lit in English). These last two courses may be found under the Interdisciplinary section, p.33.

History and the Social Sciences

The diploma requirement for history is successful completion of *United States History (History 35)* plus one trimester elective taken in the Upper or Senior Year.

The introductory courses in the social sciences deal with man in various environments, geographical, economic, social, and political. They aim to offer Juniors and Lower Middlers opportunities to study and evaluate basic social science concepts. A course in biography centers on the contributions of outstanding men. The approach is topical; the method depends on the substance and the skills at hand.

The courses in history are offered to Upper Middlers and Seniors. They are based on the conviction that a knowledge of the past is essential if an individual is to function effectively as a citizen in a modern democracy. Again, the approach is topical; the traditional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review.

Multi-disciplinary courses in the social sciences are also available for Upper Middlers and Seniors who wish to study particular societies of the twentieth century and who wish to have a work-study off-campus learning experience.

The essential purpose of all courses is to give the students training in the understanding of domestic and international problems that will serve them well as citizens. It is also hoped that for some students the courses may kindle an interest in the study of human society, past and present, that can be a source of pleasure and profit all their lives.

Introductory Courses in the Social Sciences

Social Science 10, 12, 13, 14, 15, and 16

Normally one-term courses. Four prepared class periods. For Juniors and Lower Middlers. These courses deal with man's geographical, economic, social, and political environments. Course materials include a variety of readings, films, slides, graphic and pictorial displays and maps. Among these are notetaking, outlining, essay writing, map and graph making, slide taping, socratic exchange, informal debate, and group discussion. These courses emphasize those basic skills that enable students to make logical definitions, accurate analyses and summaries, relevant generalizations, and valid conclusions from marshalled arguments.

10—1 **Human Geography**

10—2 It has been said that the proper study of mankind is man, but it is also true

10—3 that to understand properly the place of man on the earth it is necessary to know something of our surroundings. This course concerns itself with the principles of human geography or the interrelationship between man and his natural environment. The organization of the course is topical; after an initial examination of the basic physical characteristics of the planet we live on, certain issues are examined in greater detail. Among these are the use and misuse of natural resources, the population problem, the crisis of the cities. Various associated topics, such as exploration, cartography, and map reading are also considered. Other resources include a variety of books, periodicals, maps, films, and slide tapes. There are a number of individual and group projects during the term.

12—1 **An Introduction to Government and Politics:**
12—2 **A Study of State and Local Government**
12—3 Man is a political being and the political environments closest to him, although the ones he may be least aware of, are those of his own community and state. Many people know that there is some kind of local government but few know how the officials are chosen and what they do after they are chosen. Everyone knows they must pay many kinds of taxes but few know how tax money is spent in the community. There is clearly some kind of relationship between the town and the state but the nature of the relationship may not be clear to very many. This course focuses on the governments closest to us, the ones that all of us have to deal with in some way at some time (Mr. Gurry)

13—1 **The Development of the Modern Economy**
13—2 After a brief introduction to the development of the contemporary problems of industrialization, sources of energy, and population, this basic course examines the American economy since 1929. It looks closely at the relationship between government policies and business, poverty and distribution of income, and growth and the environment. (Mr. Sewall)

14—1 **China Today**
14—2 Since about one-fifth of the earth's population is Chinese, what happens in
14—3 that country is of tremendous significance to the rest of the world. One of the questions often asked by observers about Communist China is, "Will it last?" In this course we examine some of the ideas and experiences from China's past that are most remembered and honored (or dishonored) in its present. This exercise makes us, if not instant prophets, at least well-informed observers of the adjustments that China's aging and shifting leadership will have to make in the future. Emphasis is also put on the development of the student's skills in history: reading, note-taking, and writing are stressed, in preparation for later work in the field. (Ms. Sizer)

15—12 **The Emergence of Man (T2)** (a two-term commitment)
15—23 Using an anthropological approach, this course concerns itself with the development of the human species and of human society. After an introductory study of two contemporary hunting and gathering societies, the course focuses on the origins of humanness, tracing man's biological and cultural development during the Pleistocene Age. With the arrival of modern man, students consider the emergence of complex societies, using evidence from Jarmo to explore the implications of the Neolithic Revolution, and from Sumer to study the advent of civilization. A wide variety of materials are used: readings (including materials published by the American Anthropological Association), films and filmstrips, fossil casts, and artifacts. In addition, considerable use is made of the resources of the Peabody Museum of Archaeology.

16—1 **Major "Isms" and the Nation State**
16—2 The course is fundamentally a study of government as seen through four pre-
16—3 vailing "isms" of the contemporary world, namely: capitalism, socialism, fascism, and communism. The approach is largely descriptive, analytical, and comparative and is therefore concerned with the "isms", historical context, their basic principles and policies, their philosophical and psychological roots, their nature as ideological systems and de facto governments, their variant structures and objectives, their mutual antagonisms and incompatibility, and their place in the balance of international ideas. It is a course in which institutions, persons, principles, concepts, theories, and ideas abound; and although it is not a complete presentation of the subject, it is a serious and complex introduction. (Mr. Bunnell)

Advanced Courses in the Social Sciences

401—0 **Man and Society: Urban Studies**
Four prepared class periods. For Upper Middlers and Seniors. Prerequisite: Permission of the instructor; Washington Interns are not eligible. A multi-disciplinary course in the social sciences that focuses on the post-World War Two American city. Fall Term. Four prepared class periods. During this term the class studies three topics: (1) the relationships among racial, religious and ethnic groups, (2) power, leadership and decision making, (3) poverty, its physical and cultural manifestations. For the Winter Term students live at the South End House in Boston and work in internships in public and private community and city-wide agencies. The work job is the key part of the Winter Term. In the winter the students develop, with the instructor's guidance, individual goals and criteria to measure the success in achievement of these goals. Readings, weekly discussion groups, and community involvement grow out of the job experience and life in the South End. Each student keeps a journal during the Boston part of the course. The Spring Term opens with a week's evaluation by each student of his winter's experience. Then each student does a tutorial project on a question which was formulated as a result of the Fall Term's classroom study or the Winter Term's job experience. (Mr. Lyons)

402—1 **Man and Society: Revolutionary Mexico**
402—2 Four prepared class periods. For Upper Middlers and Seniors. A multi-
402—3 disciplinary course in the social sciences that focuses on Twentieth Century Mexico. Four topics are studied: (1) relationships of differing cultural groups; (2) persistence of poverty; (3) violence and social change in a continuing revolution; (4) organization and articulation of power groups in the process of decision making. All reading assignments are in English. (Mr. Frederick)

403—23 **Environments and the Individual**
Four prepared class periods. An exploration of the ways in which different societies shape growing persons, whether by conscious or unconscious design, and of the meaning of individual freedom within a social context. The course begins with a study of the socialization of children and young adults in a primitive tribe and in ancient Greece, then examines the efforts of nineteenth century social theorists such as Comte, Fourier, and Marx to explain individual learning or social change, and to design working utopian communities. Moving into the twentieth century, the class compares psycho-analytic approaches to understanding human growth with behaviorist concepts of learning and teaching, and finally, seeks to analyze elementary and secondary schools (including Phillips Academy) as organized environments.

All students undertake some kind of community service or investigative fieldwork during the course in order to directly involve themselves in the creation or analysis of social environments near at hand.

Texts include Werner Jaeger, *Paideia;* writings of Comte, Fourier, and Marx; Erikson, *Childhood and Society;* Skinner *The Technology of Teaching;* Myerson, ed., *Two Blocks Apart;* and Dennison, *The Lives of Children.* (Ms. Lloyd)

404—3 **Introduction to Economics**
Four prepared class periods. For Seniors. This course is an introduction to economic theory and its application to the real world. It focuses on the nature of capitalism and the Marxian critique of the capitalist system. It considers demand, supply, and prices; it investigates the decline of free enterprise and the rise of oligopolies and multinational corporations. It looks at the managed capitalism of the United States and the role of the federal government's fiscal and monetary policy in economic growth. Finally, it discusses selected economic problems today, particularly agriculture, international development, and the concept of abundance. Readings include McConnell, *Economics;* Heilbroner, *Inquiry into the Human Prospect;* Potter, *People of Plenty;* and Meadows et al, *The Limits to Growth.* (Mr. Sewall)

405—23 **Man and Society: Studies in Contemporary Mexico**
Four prepared class periods. Prerequisite: *Man and Society: Revolutionary Mexico, (Social Science 402),* and third-year Spanish or its equivalent. The Winter Term is a work-study experience in Leon, Mexico. The students live with Mexican families and work under the direction of Mr. R.P. Merrill at Instituto "IMLE." The Spring Term is devoted to tutorial studies of topics elected by students as a result of interests stimulated by their work and experience during the Fall and Winter Terms. Students who take the Winter Term do not have to continue with the Spring Term. (Mr. Frederick)

History Courses

20—1 **Leaders of the Western World: The American Scene**
20—2 Four prepared class periods. For Lower Middlers. As a comparative study of
20—3 American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies of men and women from the days of John Winthrop and Anne Hutchinson to those of Martin Luther King. Representative paperbacks used are: Samuel Eliot Morison, *Christopher Columbus, Mariner;* Marquis James, *Andrew Jackson, The Border Captain;* and Thomas T. Lyons, *Black Leadership in American History.* (Mr. Frederick)

21—123 **Leaders and Issues of the Western World: The European Scene**
Four prepared class periods. Open to Lower Middlers, A full-year sequence but may be elected on a term basis. The course covers roughly the medieval to early modern period of European history and the personalities and ideas that influenced it. An attempt is made to recreate the climate of former ages by including not only historical facts but the ideas and movements which changed civilization through literature, art, and the interplay of political, religious, and social forces. Course material includes biographies, plays, or studies in social history and some reading of original texts. Representative titles of paperbacks used are *Medieval People,* by Eileen Power, *Saint Joan* by G. B. Shaw, *The Agony and the Ecstasy* by I. Stone,R. Bainton's *Martin Luther,* Mattingly's *The Armada,* and *The Splendid Century* by W. H. Lewis. The Fall Term covers roughly the period up to the early Renaissance; Winter Term, Renaissance and Reformation; Spring Term, the religious wars, the development of national states, and the struggle between Absolutism and Constitutional Government. (Mr. Royce)

35—0 **The United States**
Four prepared class periods. For Upper Middlers and Seniors, though normally taken in the Upper Middle year. This course, together with an additional term course to be elected from among the *40, 50* or *60* level history and social science courses, fulfills the diploma requirement in history. *History 35* is based on a series of paperbacks, original documents, and other readings that provide material for a survey of the history of the United States from the period before the Revolution to the present. Early topics stressed are the American Revolution, the establishment of the Federal Union, the age of Andrew Jackson, and the Civil War and Reconstruction. The emphasis then shifts to the industrialization of the United States, the problems that industrialization produced, and the attempts of the American people to deal with these problems. Finally, the course deals with the emergence of the United States as a world power, its part in two world wars, and the problems that it faces today. At the start of the course, emphasis is placed on such skills as close reading, note taking, and the writing of essay questions. Later on the student is introduced to different kinds of historical material, with more emphasis on discussion. In the Spring Term the writing of a research paper represents a major part of the work.

Representative titles are Edmund Morgan's *Birth of the Republic,* two volumes in Macmillan's *New Perspectives in American History* series, two volumes in the American History Series edited by Carl N. Degler and David M. Potter, two volumes in the Wiley American Republic Series, and William E. Leuchtenburg's *The Perils of Prosperity.*

Candidates for the *Washington Intern Program* are selected from students taking *History 35* as Upper Middlers.

41—123 **East Asia in Revolution**

Four prepared class periods. For Upper Middlers and Seniors. "Revolution" has become cheap currency, but there is really little else that can appropriately characterize the movement of Chinese and Japanese histories over the past century. The course is thought of as a year-long course, but it is offered in three term-contained units as follows: Fall: THE TRADITIONAL EAST ASIAN SETTING; Winter: THE IMPACT OF THE WEST; Spring: THE EAST ASIAN RESPONSE.

To begin to understand the dynamics of contemporary East Asia, an attempt must first be made to comprehend the East Asian tradition. For this purpose, the Fall Term's work includes readings from E.O. Reischauer and J. Fairbank, *East Asia: The Great Tradition;* C. P. Fitzgerald, *A Concise History of East Asia;* H. G. Creel, *Chinese Thought from Confucius to Mao Tse-tung;* E. O. Reischauer, *Japan, The Story of a Nation;* J. Fairbank, *The United States and China;* and Allie M. Frazier (ed.), *Chinese and Japanese Religions.* The Winter and Spring Terms include readings from Teng and Fairbank, Michael and Taylor, Mary C. Wright, O.E. Clubb, H. Borton, R. K. Hall, A. D. Barnett, R. North, S. Schram, and E. Snow.

The course consists of readings (as noted above), lectures, audiovisual materials, map exercises, and work projects. In short, the overall effort is to introduce American students to Asia through study and critical examination of essentially the past century's histories of China and Japan. (Mr. Royce)

42—123 **The Discovery of India**

Four prepared class periods. For Upper Middlers and Seniors. The title of this course is taken from Jawaharlal Nehru's work written in Admadnagar Fort prison during a five-month internment in 1944. Nehru was seeking to discover India for himself as the molder of an Indian nation. We, as Englishmen before us, are attempting in this short course to begin discovery of the setting, the motivations, and the contemporary problems of an alien people who constitute the second most populous nation on earth. In the Fall Term we are especially concerned with Traditional India: geography, thought, religion, the social setting, and early history. The following Winter Term concentrates on Imperialism (British India), Gandhi, and Indian Independence. Readings may include Nehru; P. Spear, *India: A Modern History* and *India, Pakistan and the West;* H. Smith, *The Religions of Man;* A. M. Frazier, *Readings in Eastern Religious Thought;* P. Woodruff, *The Men Who Ruled India: The Founders,* Vol. I; Robert Payne, *The Life and Death of Mahatma Gandhi;* and M. Brecher, *Nehru: A Political Biography.* (Mr. Royce)

43—0 **Modern Europe: A Survey**

Four prepared class periods. Open to Upper Middlers and Seniors. The Fall Term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1789-1914, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect; the nature of totalitarianism; the cold war and the rise of the superpowers.

Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. This course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Richards)

44—2 **Modern Russia**
44—3 Four prepared class periods. Open to Seniors and to Upper Middlers who have permission of the instructor. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between east and west; the rise of the intelligentsia; Lenin and the Bolshevik Party; the Stalinist totalitarian system; Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs, and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used. (Mr. Richards)

45—1 **International Relations: The Present Patterns**
45—2 Four prepared class periods. For Upper Middlers and Seniors. In its essentials
45—3 the course is limited to the contemporary era of international affairs, a span of years that is now more than a quarter of a century old, extending, from the diplomacy of World War II to the current era of détente. The emphasis is upon the international politics of the world's two superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. The course does not seek to fix praise or blame but rather to discern and comprehend the main lines of the predicament and to suggest possible alternatives. Textbooks, the periodic literature of journals, monthly and fortnightly publications, and newspapers are all employed. (Mr. Bunnell)

46—2 **Topics in the History of Phillips Academy and Abbot Academy**
46—3 Four prepared class periods or the equivalent. Involving work in the Phillips Academy and Abbot Academy Archives on some aspect of history of the schools, the course introduces the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mr. Allis)

47—1 **Victorian England: England in an Age of Expansion**
Four prepared class periods. For Upper Middlers and Seniors. The course is devoted to a study of the major movements and changes that challenged the British people from 1789 to 1901. It is divided into three periods: a study of the background of 1832, the early Victorians, and the late Victorians. The final eight weeks of the course are concerned with the last two periods. Since Victorian literature more directly influences the life and thought of the times than that of any other period of English history, the course examines closely those writers whose works were influential in adapting English minds and institutions to changing conditions. (Mr. Harrison)

48—2 **The Rise and Fall of the American Presidency, 1940-1974**
Four prepared class periods. For Seniors. The course studies the extraordinary expansion of presidential power in law and practice since the 1930's. The American presidency has been the focal point of the United States government in times when vigorous government action has been called for. The Great Depression, World War II, the Cold War, the Civil Rights Revolution, the War of Poverty, and the Vietnam War—all called for the increased powers for the executive. And Presidents Roosevelt, Truman, Kennedy, Johnson, and Nixon seized the opportunities to expand presidential power. But in the Nixon administration, the nation saw executive usurpation of illegal powers, a subversion of the Constitution, and a threat of presidential tyranny. The climax was the "imperial presi-

dency" and impeachment. The course consists of class discussions and several short analytical papers. The readings are drawn from: Clinton Rossiter, *The American Presidency,* Richard Neustadt, *Presidential Power,* Arthur M. Schlesinger, Jr., *The Imperial Presidency,* George Reidy, *The Twilight of the Presidency,* Theodore White, *The Making of the President, 1972,* Carl Bernstein and Robert Woodward, *All the President's Men,* Raoul Berger, *Impeachment,* and transcripts from the "Watergate caper," 1972-74. (Mr. Lyons and Mr. Frederick)

49—12 **The City in America**
Four prepared periods. Limited to fifteen Seniors and Upper Middlers. Prerequisite: permission of the instructor. Fall Term work focuses on the role of the historian and the evolution of the city from prehistoric times through the American colonial period. The Winter Term deals with different "types" of American cities evolving between the Eighteenth and Twentieth Centuries. General readings include: Edward Banfield, *The Unheavenly City Revisited;* Lewis Mumford, *The City in History;* Alexander B. Callow (ed.), *American Urban History;* Charles Glaab and A. Theodore Brown, *A History of Urban America;* several urban novels like Theodore Dreiser, *Sister Carrie,* and various monographs like Gunther Barth, *Instant Cities.* (Mr. Quattlebaum)

49—3 **The City In America**
Prerequisite: *History 49-1* or *History 49-2.* The student embarks on individual, historical research projects, either on a particular American city or on a selected aspect of several cities.

50—1 **Schools in America**
50—3 Four prepared periods. For Seniors and Upper Middlers. (This course is planned parallel to *History 51, Families in America,* and can be taken in a coordinated sequence with that course, as well as a single term-contained offering.) The course analyzes the purposes for schooling perceived during the nineteenth and twentieth centuries and the institutions Americans created and supported to promote those purposes. Reading is drawn from historical sources and from contemporary social science and philosophy. Students are expected to relate the material to the "aims" of their own educations. (Dr. Sizer)

51—2 **Families in America**
51—3 Four prepared periods. For Seniors and Upper Middlers. (Given parallel to *History 50.* See note under that course description.) The course examines family structure, function, and development from the colonial period to the present. Sex role, methods of child nurture, economic base of the family, and varieties of family patterns growing out of different ethnic backgrounds are among the major topics studied. Readings are drawn from primary and secondary sources. (Mr. Crawford)

52—3 **Quantitative Historical Data Analysis**
Four perpared periods. Prerequisite: Permission of the Instructors. This course provides an introduction to the use and abuse of quantitative methods in historical research. Attention focuses on three main areas: elementary statistics, relevant historical literature, and the logic of historical inquiry — that is, the fundamentals of research design. To accomplish these purposes, participants do assigned homework problems on statistics and read exemplary works in the field, in order to discuss their merits and demerits. Most of the reading is from two books: Herbert M. Blalock, Jr., *Social Statistics;* and Robert P. Swierenga (ed.) *Quantification in American History.* (Messrs. Best and Quattlebaum)

53 — 123 **Women in History**
Four prepared class periods. For Upper Middlers and Seniors. A chronological full-year sequence but may be elected on a term basis. This course studies the role and status of women in cultures and societies which have influenced and determined our own. Special attention is paid to women who typify their prescribed roles as well as those who defied or ignored convention.

In the Fall Term, after a look at the restrictive position of women in ancient Greece, the course considers the development of an enlightened, liberal status for women in Rome. The latter part of the course focuses on the changes brought about by the emergence of Christianity and the subsequent evolution of the early Middle Ages.

This period is characterized by the mingling of Christian/Roman attitudes with those of the Germanic tribes, a combination well illustrated by Charlemagne. (Ms. Clark)

The Winter Term continues with the latter Middle Ages after Charlemagne and then studies the part played by women in the Renaissance, with its ideal of the development of the human faculties. From the 16th century on, women as rulers successfully molded policies and subtly influenced the culture of their time. The classic age of France created the salons where men and women met on an equal basis and where good taste and talent overcame the rigid barriers of sex. With the French Revolution and Romanticism came a growing belief in equality, even between the sexes. (Ms. Clark)

The Spring Term studies the women of the 19th and 20th Centuries. In 1848, a year of world revolution, a group of American feminists issued a declaration of women's independence. The statement was more one of hope than of reality. However, during the nineteenth century in this country and in England, the economic status of women began to improve and, as it did so, the hope of political, legal, social, and occupational opportunity began to be realized. The early part of the term focuses on the political feminist movement and compares it with other contemporary reform movements. Women gained the right to vote in the early twentieth century. What did women do with this right? How do the role of women in the twentieth century and the struggle of women to reshape that role reflect or reject traditional American values? The latter part of the course evaluates these and other questions by looking at individual women, both those who typify the traditionally prescribed role and those who defy convention. (Dr. Flanagan)

54— **Art and Architecture in Antiquity and the Middle Ages**
Four prepared class periods. For Uppers and Seniors. This course is an introduction to Western art from Archaic Greece to fourteenth century Italy. Focusing primarily on architecture and sculpture, it covers major trends in Greek, Roman, Byzantine, Romanesque, and Gothic art. It stresses the basic vocabulary, fundamental questions, and analytical methods of the art historian. (Mr. Sewall)

55—2 **Art and Architecture in the Renaissance and Baroque**
Four prepared class periods. For Uppers and Seniors. It is strongly suggested that students planning to take *History 55* have completed *History 54*. This course covers European art from the Early Renaissance in Florence and Flanders to the Neoclassical movement of the late eighteenth century. (Mr. Sewall)

56—3 **Art and Architecture Since the French Revolution**
Four prepared class periods. For Uppers and Seniors. It is strongly suggested that students planning to take *History 56* have completed *History 55*. This course covers the diverse movements of "modern art" in the nineteenth and twentieth century. It includes occasional visits to museums in Boston and New York. (Mr. Sewall)

History 54, History 55, and either History 56 or Art History 57 when taken consecutively combine to form a full year's preparation for the Advanced Placement Examination in Art History.

Art History 57—3 **American Art Reveals American Life**
Prerequisite: *Visual Studies (Art 10)*. Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course takes the opportunity of the Bicentennial to look closely at the primary source material in the collection of the Addison Gallery of American Art. Providing the chance to study original works of art, the course uses the paintings, sculpture, graphics,

and ship models in the Addison's collection as a basis for a survey of the arts in America. In addition to assigned reading each student works on an independent project object in the museum's collection.

59—123 **Ancient History**
Four prepared class periods. For Upper Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

60—1 **Elizabethan England**
60—2 Four prepared class periods. For Upper Middlers and Seniors. The years when
60—3 England was ruled by the Tudor family were some of the most colorful and pivotal in English history. During those years, crucial political and religious changes were initiated, creativity was encouraged, and England prospered. This course focuses on Elizabeth and her England in the context of the European scene and is intended to be a study in depth. Social and cultural conditions are studied as well as political and economic conditions. The books used include the Neale biography of Queen Elizabeth and *This Realm of England* by Lacey Baldwin Smith. (Ms. Minard)

61—1 **The Middle East**
61—2 Four prepared class periods. For Upper Middlers and Seniors. Few if
61—3 any regions of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. And this course traces the region's emergence from the decline and fall of the Ottoman Empire (the famous "sick man of Europe") to the present day with an emphasis upon the political and economic aspects of the leading Arab states and Israel. But, as the name Middle East implies, the area is a global intersection and its history reflects a constant interplay between the nations of Africa and Eurasia as well as a certain "presence" of the Superpowers of our time; and it is, therefore, the center of a world security problem. Hence, the course also surveys international aspects with special attention to such matters as Middle Eastern oil and Arab-Israeli relations. A term paper is part of the course's requirement. (Mr. Bunnell)

Interdisciplinary

All courses are electives. Courses that cross over department lines are listed here as a reference for students when planning their programs of studies.

Basics **Study Skills**
10—1 Four prepared class periods.
10—2 Permission of the instructor required. The course builds both reading and
10—3 organizational skills. The reading program seeks to increase reading efficiency (comprehension and speed) by teaching the student how to become more thoughtfully and actively involved with his material. On the organizational level, the student is involved in skill-building in such areas as note-taking, retention, and exam preparation. (Dr. Irish)

Synthesis **Synthesis: A Multidisciplinary Approach to Problems**
40—1 Four prepared class periods. Open to Seniors. This course focuses on problems
40—2 which require for their understanding and resolution the concurrent use of a
40—3 number of disciplines. The disciplines range from ethics and philosophy to art

and literature to the natural and social sciences. The focal problems range from World Hunger to Sex Differences to Television. (Dr. Flanagan, Ms. Perrin, Mr. Sizer)

Comparative Literature Courses in Translation

Russian Lit 500—1 **Russian Literature in English**
Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, Westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Ostrovsky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development. (Mr. Lane)

Soviet Lit 501—2 **Soviet Literature in English**
Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions. (Mr. Lane)

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late 20th century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization or dissemination of mathematical knowledge.

To serve all needs the mathematics curriculum is built around a core sequence of eight trimester courses: *11, 12* and *13* (normally given in the ninth grade); *24, 25,* and *26* (normally given at the tenth grade); and *37* and *38,* completion of which will satisfy diploma requirements and provide a firm foundation for more advanced study. A student entering in the ninth grade with little or no algebra normally starts with *Mathematics 11.* A student entering with one year of algebra takes *Mathematics 20* for one year and joins the standard sequence with *37* in his second year. Those with one year of algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 30* for one year.

Placement of new students in the appropriate first course is made in light of the record in previous schools and the results of a self-administered diagnostic test in elementary algebra which is sent to newly admitted students in the Spring.

The College Entrance Examination Board Achievement Test in Mathematics is most appropriately taken near the end of or immediately following *Mathematics 30, 31,* or *38,* as may be appropriate.

Beyond the required level, i.e., the equivalent of *38,* the department offers many electives, some of which lead up to and well beyond the Advanced Placement Examinations of the College Board. The prerequisites of such courses should be carefully noted, particularly by those students who are involved in terms away from Andover.

In addition to its course offerings, the department manages the campus

computer time sharing system. The computer, a Digital Equipment Corp. PDP-11/45 is housed in the mathematics building and serves thirteen teletypewriter terminals, of which eight are available for student use in courses and projects.

Courses Leading to Satisfaction of the Diploma Requirement:

11—1 **Beginning Algebra**
11—2 Five prepared class periods. An introduction to the language of algebra. The solution of simple equations and inequalities, the study of polynomials in one variable, factoring and word problems. Prerequisite: Less than half a year of algebra.

12—2 **Algebra**
12—3 Five prepared class periods. Simple functions and their graphs of linear equations, polynomials in two variables, rational algebraic expressions, equations and word problems. Prerequisite: *Mathematics 11.*

11-12—1 **Algebra**
Five prepared class periods. A "lead-in" course for entering students who have had up to a year of algebra but need their skills strengthened before entering *Geometry.* It normally prepares a student for *13* but if necessary *12* is available in the Winter Term for further strengthening. Prerequisite: From a half to a full year of algebra.

13—1 **Introduction to Geometry**
13—2 Five prepared periods. Simple logic, the nature of proof, congruence of
13—3 triangles, parallel lines and parallelograms. Prerequisite: *Mathematics 12, Mathematics 11-12* or the equivalent.

20—0 **Geometry and Algebra**
Five prepared class periods. A year-long course for entering students who have had a *strong* ninth grade algebra course but no geometry. Satisfactory completion of this course allows entrance to the normal sequence at *Mathematics 37.* Prerequisite: A strong year of algebra.

24—1 **Algebra and Geometry**
24—2 Five prepared class periods. The continued study of geometry with
24—3 emphasis on its relation to algebra. The coordinate plane and the algebraic description of figures therein. Introduction to the computer. Prerequisite: *Mathematics 13* or its equivalent.

25—1 **Algebra and Geometry**
25—2 Five prepared class periods. This course involves more work on the
25—3 computer, algebraic and geometric inequalities, algebraic functions and geometric transformations considered both from a geometric and functional point of view. Prerequisite: *Mathematics 24.*

26—1 **Algebra and Geometry**
26—2 Five prepared class periods. Geometric similarities, radicals and quad-
26—3 ratic equations, circles, loci and an elementary study of the conic sections centered at the origin. Prerequisite: *Mathematics 25.*

30—0 **Intermediate Algebra and Elementary Functions**
Five prepared class periods. A year-long course for entering students with one year of algebra and one year of geometry. Completion of this course satisfies the diploma requirements. Topics include use of the computer; the structure of groups and fields, with applications to elementary algebra; polynomial, circular, exponential and logarithmic functions and their applications. Prerequisite: Credit for one year of algebra and one year of geometry.

31—0 **Geometry and Circular Functions**
Five prepared class periods. A year-long course for entering students who have studied algebra in the ninth and tenth grades but who have not studied

geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. Prerequisite: Credit for one year of elementary algebra and one year of intermediate algebra.

37—1 **Algebra and Geometry**
37—2 Four prepared class periods. The coordinate geometry of conic sections
37—3 extended, circles, sectors and segments, the circular functions and their applications to solutions of triangles. Prerequisite: *Mathematics 26* or *20*.

38—1 **Transcendental Functions**
38—2 Four prepared class periods. The coordinate geometry of conic sections
38—3 extended, inverse functions, logarithmic and exponential functions mathematical induction, applications of circular functions. Completion of this course satisfies the diploma requirements. Prerequisite: *Mathematics 37*.

40—12 **Elementary Functions (T2)** (a two-term commitment)
Five prepared class periods. A two-term course for entering Seniors who have not had trigonometry but have studied three years of mathematics in high school. Required of those students whose prior work may be found not to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. In certain cases high quality work in the Fall Trimester of *40* may be regarded as satisfying diploma requirements, but the Winter Trimester of *40* is a prerequisite for continuing study at the *50* level. Prerequisite: Credit for three years of high school mathematics. Not open to students from *Mathematics 38* or *39*.

Elective Courses

Only courses with sufficient enrollment will be given.

21—3 **Intuitive Calculus**
Four prepared class periods. Open to Juniors and Lower Middlers. This course introduces limits in an intuitive manner and begins to develop the calculus of polynomials so useful in elementary Physics. Prerequisite: None.

39—2 **Algebraic Structure**
39—3 Four prepared class periods. The Boolean algebra of sets and statements; elementary properties of groups and fields; scalars, vectors, matrices, and their geometric applications. An elective designed to demonstrate the unifying effect of algebraic structure on the entire mathematics curriculum. Commended to students with a serious continuing interest in mathematics. Prerequisite: *Mathematics 38*.

41—1 **Exploring Data**
41—2 Four prepared class periods. An introduction to techniques of uncover-
41—3 ing the useful information contained in masses of numerical data. In contrast to *43* and *44* no reliance is placed on the knowledge of or development of heavy mathematical tools. Prerequisite: None.

42—1 **Probability**
Four prepared class periods. Includes sample spaces, counting problems, sampling, conditional probability, applications using the computer, random variables expected value, variance and standard deviation. Prerequisite: *Mathematics 38*.

43—2 **Statistics**
Four prepared class periods. Includes applications of the binomial and standard normal distributions, hypothesis testing and statistical inference, independent work on experiments and selected topics. Prerequisite: *Mathematics 42*.

44—3 **Statistics**
Four prepared class periods. Includes elementary statistical inference with applications to social and physical sciences. Estimation and Hypothesis Testing. Prerequisite: *Mathematics 43*.

46—3 **Theory of Numbers**
Four prepared class periods. A study of the elementary theory of numbers, emphasizing the arithmetic of the integers. First consideration given to divisibility and prime numbers, ideas that underlie much of the later work. Other topics considered are congruences, Diophantine equations (and Fermat's Last Theorem), continued fractions, and certain special numbers. Prerequisite: *Mathematics 37.*

47—1 **Computer Programming**
47—2 Four prepared class periods. An introduction to programming in the
47—3 BASIC-PLUS code. The solution of mathematical problems with computer assistance. Prerequisite: *Mathematics 37* or its equivalent.

49—3 **Problems, Brain Twisters and Puzzles**
Four prepared class periods. The course investigates a wide variety of mathematical problems. The problems, whose statement may range from one short sentence to a long paragraph, are selected from sources such as prize contests and collections of mathematical problems and puzzles. Both the technique of how to begin to solve a problem and the skills needed in the actual solution are stressed. Prerequisite: *Mathematics 37.*

51—1 **Elementary Calculus**
51—3 Five prepared class periods. The first of a three course sequence that covers the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics covered include: review of functions and graphing, limits, derivatives, implicit differentiation, chain rule, and continuity. Prerequisite: *Mathematics 30* or *38.*

Elementary Calculus (T2) (a two-term commitment)
52 — 12 Five prepared class periods. Curve sketching, maxima and minima
52 — 23 problems, related rates, Rolle's Theorem, Mean Value Theorem, indefinite integral, areas, sines, cosines, logarithmic and exponential functions, and differential equations. Applications of the integral including areas between curves, distance and velocity, volumes of revolution, and work; techniques of integration, conic sections, and polar equations. Prerequisite: *Mathematics 51.*

54—3 **Infinite Series and Differential Equations**
Five prepared class periods. This course extends the work of *Mathematics 52* to prepare the student for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics 52* or may be taken simultaneously with *52.*

55—0 **Honors Calculus**
Five prepared class periods. A year-long course in analytic geometry and calculus which begins only in the Fall. Students contemplating Off-Campus Projects at some time during the year should not enroll in this course. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52.* Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics 30* or *38,* and departmental permission.

61—0 **Calculus Continued and Other Topics**
Four prepared class periods. The course completes preparation for the College Board BC Advanced Placement Examination, but also includes additional topics at the discretion of the instructor. Prerequisite: *Mathematics 52.*

65—0 **Linear Algebra and Vector Calculus**
Four prepared class periods. For students of demonstrated ability and interest who intend to continue their study of mathematics in college. Vector spaces, linear transformation, matrices, determinants, systems of linear equations, the calculus of functions with vector arguments and vector values. Prerequisite: *Mathematics 55* or its equivalent.

Special Courses

30—1 **Mechanical Drawing (Elementary)**
30—2 Two prepared class periods and four unprepared. Not open to Juniors. A term-contained beginning drawing course that includes the use of drawing instruments, lettering, geometric constructions and loci, sketching, orthographic projection, spatial relations, and sectioning. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31—2 **Mechanical Drawing (Intermediate)**
31—3 Two prepared class periods and four unprepared. A term-contained drawing course in applied Descriptive Geometry and Graphics involving further work in sectioning and conventions, isometric and oblique pictorial projections, intersections, revolution, primary auxiliary views, developments, and dimensioning. Prerequisite: *Mechanical Drawing 30.*

32—3 **Mechanical Drawing (Advanced)**
Two prepared class periods and four unprepared. A term-contained technical drawing course consisting of substantial work in detail and assembly engineering drawing, perspective, print reading, successive auxiliary views, and fundamentals of design. Students with special interests are given an opportunity to do additional work in a related field such as rudimentary structural or naval architectural drawing, sheet metal layout, or graphic presentations of data. Prerequisite: *Mechanical Drawing 31.*

30—1 **Navigation (Coastal Piloting)**
30—2 Four prepared class periods. Not open to Juniors. A term-contained
30—3 course in Piloting: i.e., marine navigation within sight of land or landmarks. Substantial dead reckoning and special case plotting is done on charts and small area plots. Aids and dangers to navigation are studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, radio, radar, and Loran.

31—2 **Navigation (Celestial)**
31—3 Four prepared class periods. A term-contained course in Celestial Navigation: i.e., navigating at sea by means of the stars, sun, moon, and planets. Nautical astronomy is studied. Significant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214 and the Nautical Almanac, special lines of position, the use and correction of a marine sextant, times of observational twilight, and "a day's work" at sea. Prerequisite: *Navigation 30.*

Modern Foreign Languages

The foreign language diploma requirement is competence at the level of the third year of a modern or anicent language. Such competence is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of eight, or even seven trimesters, by passing a special examination set by the department concerned.

Placement of new students in the appropriate first course is made in light of the record in previous schools, information received on questionnaires sent to newly admitted students and their current teachers in the spring, and a personal interview with the chairman of the particular language department, when deemed necessary.

All foreign languages offered at Phillips Academy are acceptable for college admission. For certain fields of concentration and in certain areas

of graduate study, especially for the Ph.D. candidate, specific modern languages are often required. Consultation with academic advisors and college counselors is invited.

The *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are *not* recommended for students of limited language ability. Entering Seniors with no previous language experience must pass a *10-20* course to obtain their diplomas.

All students are encouraged to continue foreign language study beyond the minimum requirement.

French

The French Department offers a six-year course of study. The first two years are devoted to teaching the basic language structure. In the third year, while continuing to progress in the language, a student is given the opportunity to choose the trimester courses which best serve his needs. Fourth and fifth-year courses offer study in depth of both literature and civilization. Students who demonstrate unusual aptitude for and interest in the language during the first year of study are invited to enter special sections which move ahead more rapidly without demanding more time. Those who complete the accelerated sequence may meet the diploma requirement after seven trimesters as they move directly into fourth-year courses.

In all courses, students are taught to understand, speak, read, and write the language, paralleling as closely as possible the natural order of learning. French is the language of the classroom and at no time does the department teach the art of translation.

10 — 0 **French**
Five prepared class periods. First-year French for students who have had no previous courses in the language. Students make frequent use of the language laboratory. Listening comprehension and the use of basic patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced, as well as simple reading material. Text: Capelle et Capelle, *La France en Direct*.

10-20—0 **French**
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence. Text: Benamou, Ionesco, *Mise en Train*. (Not offered in 1976-77).

11—0 **French**

Five prepared class periods. This first-level French course is designed to help the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for him to enter a regular second-level section. The course emphasizes the development of aural-oral skills and prepares for *French 21* the following year. Texts: Pucciani et Hamel, *Langue et Langage;* Valette et Valette, *Lison;* Cambell et Bauer, *Arsène Lupin*.

12—23 **French (T2)** (a two-term commitment)
Five prepared class periods. An accelerated course offered to students of high ability. This course is continued in *French 22*. Texts: Pucciani et Hamel, *Langue et Langage;* Pimsleur, *C'est la vie*.

20—0 **French**
Five prepared class periods. For students who have completed *French 10.* While continuing to develop the audio-lingual skills, the aim of this course is to teach reading and the ability to understand non-technical French prose without recourse to translation. Texts: Capelle et Capelle, *La France en Direct;* Valette et Valette, *Lisons.*

21—0 **French**
Five prepared class periods. For students who have completed *French 11* and for new students who qualify through teacher recommendation or placement examination. The aim of the course is similar to that of *French 20.* Texts: Cambell et Bauer, *La Dynamite;* Gibson, *Anthologie;* Ionesco, *Victimes du devoir;* Pucciani et Hamel, *Langue et Langage.*

22—12 **French**
Five prepared class periods. An accelerated course open to students who have completed *French 12* and to properly qualified new students. Successful completion of this course permits students to enroll in regular courses at the third-level during the spring term. Texts and reading materials include: Cambell et Bauer, *La Dynamite;* Sartre, *Les Jeux sont faits;* grammar review materials especially prepared by the department.

Third-Level Courses

At the third-level, progress in all language skills continues through their application in the study of a particular area.

These courses are designed to provide program flexibility trimester by trimester. To provide continuity, systematic and coordinated grammatical review is incorporated sequentially into all courses. Independent grammar review materials have been especially prepared by the department for this study.

30A—0 **Language Review and Contemporary French Life**
Four prepared class periods. For students who have successfully completed *French 20* but who have need of further instruction in basic language structures. The Fall Term reviews the last of *La France en Direct 2.* The last two terms are devoted to the same material as that covered in *French 30.* By permission of the Department Chairman.

30—123 **Contemporary French Life**
Four prepared class periods. This course takes a close look at many aspects of modern French civilization and studies the French people's attitude toward the problems of everyday living and thinking. A journalistic and humoristic approach is prevalent in the variety of dossiers presented in the main text by Capelle et Capelle, *La France en Direct 3.*

31—123 **Selected Readings**
Four prepared class periods. Reading comprehension skills are developed through a study of texts such as the following: Simenon, *Le Chien Jaune;* Saint-Exupéry, *Le Petit Prince;* Pagnol, *Topaze;* Vercors, *Les Silence de la mer;* Goscinny, Uderzo, *Astérix et Obélix: Le Tour de Gaule;* Gide, *Symphonie Pastorale;* Sartre, *Les Jeux sont faits.*

32—2 **Village Français**
32—3 Four prepared class periods. Using *Village en Vaucluse* by Wylie and Bégue as a basic text, the course, conducted in French, attempts to reveal the peculiar characteristics of the French people as reflected in the microcosm of a town. Several American and French towns are examined as bases of comparison. Additional readings may include Wylie, *Les Deux Villages;* Lynde, *Middletown, U.S.A.;* Pagnol, *Marius;* Michaud, *Guide France,* "Nouvel Observateur"; Daninos, *Les Carnets du Major Thomson;* Maurois, *Histoire de la France;* articles from both national and regional newspapers, and texts used by French students studying American civilization. (Mr. Sturges)

33—12 **Le Monde Francophone: French Civilization Outside of Europe**
Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the resistance to and the assimilation of French culture by the native cultures. During the Fall Term the students develop their various language skills through a study of French in Africa — West Africa, Equatorial Africa, and North Africa (Arab). In the Winter Term the emphasis is upon French in America — the Antilles (Haiti, Martinique, and Guadeloupe), the U.S., and Canada. Together with a geographical, social, and historical study, selections are read from President Senghor, Camara Laye, Bernard Dadie, Memmi, Aimé Cesairé, Guilaume M'Bia, Birago Diop, Félix Leclerc, and Giles Vigneault. (Mr. Herbst, Fall and Ms. Bayard, Winter)

34—1 **Intensive Conversation and Phonetics**
34—2 Four prepared class periods. A special emphasis on specific aspects of spoken French. Intended for students who understand French rather well but need to gain confidence and efficiency in speaking. Dialogues, speeches, debates, interviews, and role-playing are reinforced by study of topical vocabulary, idiomatic expression, and applied phonetics. Text: Frautschi and Bouygues, *Pour et contre.*

35—1 **Written Expression**
35—2 Four prepared class periods. Study and writing of basic sentence structures
35—3 and their integration into paragraphs and compositions. Students' writing, to which instructors give close, individualized attention in small classes, is based generally on selected, short readings. The course seeks a balance between different forms of writing, both original and imitative, (description, narration, dialogue, exposition, communication). Texts used may include: Hergé, *Les Aventures de Tin Tin;* Limouzy et Bourgeacq, *Manuel de Composition française.*

36—123 **Literature and Film**
Four prepared class periods. Each term two works of fiction are studied along with movies based on them. An effort is made to combine literary and cinematic excellence in choosing materials for the course so that each book or film may be studied individually for its own merits as well as compared with the other version.
The books and movies for this course vary from year to year. In 1975-6 authors included were Béroul, *Tristan et Iseut;* La Fontaine, *Fables;* Louise de Vilmorin, *Madame de.;* Pagnol, *Marius;* and Guy de Maupassant, *Un Jour à la Campagne.* Film makers were Cocteau, Clair, Ophuls, Korda, and Renoir. (Ms. Schorr)

38—3 **French for Tourists**
Four prepared class periods. The aim of this course is to provide the practical vocabulary needed to cope with everyday situations: how to handle affairs at the airport; going through customs; making a hotel reservation; taking a taxi, the subway, or a bus; visits to the bank, the hairdresser, or the doctor; buying clothes or footwear; going to a restaurant, the movies, or the theater; how to use the telephone; travel by train; motoring; and visiting a seaside resort. Emphasis is on oral communication and the acting out of situations in class, supplemented by regular use of the language laboratory. (Mr. Whitney)

39—3 **Initiation to the French Theatre**
Four prepared class periods. An active participation course in which the student follows one play from the initial reading through its final production, taking part at each step of the way. Four major phases: Reading, Analysis, Production, Performance. Throughout the course, the vocabulary of French theatrical production is studied and used.

40—123 **French**
Four prepared class periods. The course consists of three term-contained units and may include the reading of French classics and the works of modern authors, as well as conversation and composition. The choice of texts in each trimester is determined by the class and the instructor.

42—0 **French Literature**
Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open to all students who have completed three trimesters of third-level courses and who have the approval of their instructor, and to properly qualified new students. It is a transition from the study of language to the study of literature. Emphasis is placed on vocabulary building, written work, and close analysis of major literary works. Texts include: Camus, *L'Etranger;* Voltaire, *Candide;* Ionesco, *Rhinocéros;* Balzac, *Le Colonel Chabert;* and Mauriac, *Thérèse Désquéyroux.*

This course is also offered in the School Year Abroad program in Rennes.

43—12 **French History and Civilization**
Four prepared class periods. Open to all students who have completed three trimester of third-level courses and to properly qualified new students. In the Fall Term the course covers the 17th century (Louis XIII and Richelieu) through Napoleon and the First Empire. The Winter Term runs from the 1815 Restoration to June 1940 (Fall of France). There is a combination of lectures by the instructor, class discussions, slide and film presentations, and student reports. (Mr. Anderson)

43—3 **Contemporary French Civilization**
Four prepared class periods. This course seeks an understanding of French society through close study of its institutions, and its political, social and economic organization. An attempt is made to balance theory with vicarious participation in and analysis of problems and procedures of every-day French life. Cultural myths are measured against social reality, and such areas as education, the media, sports, youth, elections, and the rôle of women are explored through study of scholarly articles, magazines and newspapers (such as L'Express, Paris-Match, Le Figaro), recorded speeches and taped broadcasts. Oral reports, audio-visual presentations, "staged" debates and interviews supplement regular class discussion and lectures. Returnees from the S.Y.A. program in France with their unique experience are directly involved in the course as aides to the instructor. (Mr. Dix)

This course is also offered in the School Year Abroad program in Rennes.

44—1 **Advanced Conversation and Phonetics**
Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who feel the need for further drill in conversational patterns, and idiomatic expression. Diction, intonation and elocution are also stressed through memorization, role playing, speeches, and debates.

45—2 **Written Expression and Stylistics**
Four prepared class periods. Through a process of constant writing and rewriting the student progresses from simple, straightforward communicative writing to a style reflecting nuances of expression.

46—3 **Québec et les Québécois**
Four prepared class periods. Because of its geographical situation Phillips Academy has a unique opportunity to merge the study of French with direct observation of and participation in the North American "French experience" which is just across the nearby Canadian border as well as in the many communities surrounding Andover with large Franco-American populations. Some amount of theory is balanced with observation and analysis of every-day life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of the province as well as personal involvement through liaison with Québec schools, students, and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec. (Mr. Dix)

50—123 **French**
Four prepared class periods. Open to students who have completed the fourth-level but do not wish advanced placement. The choice of texts is determined by the class and the instructor and runs the gamut from *Astérix* to the theater of the absurd. It is taught principally through seminar discussions and conversations, with occasional oral readings and composition.

51—0 **French Language**
Five prepared class periods. A course designed to meet the requirements of the new Advanced Placement Examination in French Language. Open by invitation to students who have completed *French 40* or *French 43* and to qualified new students. Emphasis is placed on grammar, vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals.

52—0 **French Literature**
Five prepared class periods. The second year of a two-year sequence, open to students who have completed *French 42* and to others who are properly qualified, with departmental permission. This course is an introduction to French literature and prepares for the Advanced Placement Examination in French Literature through the close reading of representative texts including: Corneille, *Le Cid;* Molière, *L'Ecole des femmes;* Racine, *Brittanicus;* Beaumarchais, *Le Mariage de Figaro;* Stendhal, *Le Rouge et le Noir;* Baudelaire, *Les Fleurs du mal;* Sartre, *Huis clos;* and poetry of Hugo, Vigny, Verlaine, Rimbaud, and Apollinaire.
This course is also offered in the School Year Abroad program in Rennes.

60—123 **Contemporary French Literature**
Four prepared class periods. Open to students who have completed the fifth-level and to other well-qualified students with departmental approval. The course consists of three term-contained units covering THE PRE-WAR NOVEL, DRAMA, and THE POST-WAR NOVEL, respectively. Authors studied may include: France, Barrès, Proust, Gide, Céline, Bernanos, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Montherlant, Anouilh, Giraudoux, Aymé, Camus, Sartre, and Robbe-Grillet. *French 60* is not a literary history course. Emphasis is on particular writers and what they add to our understanding of the human condition in our times.

Senior Projects
Seniors who are taking an advanced French course or who are otherwise qualified may do apprentice teaching during either the Winter or Spring Term. They study the techniques and methods of modern language instruction; and they practice, under careful supervision, in beginners' classes. Seniors may also undertake independent study projects in French under the direction of a faculty supervisor.

German

The German Department offers a six-year course with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. The more advanced courses give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. German is used as the classroom language. Extensive use is made of the Language Laboratory.

The Department offers an accelerated course, *German 22,* for students

who show unusual ability in *German 10*. After completion of *German 22*, these students enter *German 40* and receive four years of credit after three years of study.

10—0 **German**
Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Text: Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner.*

10-20—0 **German**
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence.

20—0 **German**
Five prepared class periods. The systematic study of basic patterns and grammar is continued with Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner.* Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten;* Schnitzler *Der blinde Geronimo;* Remarque, *Drei Kameraden;* Bischsel, *Kindergeschichten.*

22—0 **German**
Five prepared class periods. An accelerated course for qualified students, covering material of both *German 20* and *German 30.* Successful completion enables a student to enter *German 40.*

30—0 **German Literature**
Four prepared class periods. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review.* Some of the books read include Brecht, *Kalendergeschichten;* Dürrenmatt, *Der Richter und Sein Henker;* Aichinger, *Der Gefesselte und andere Kurgeschichten;* Dürrenmatt, *Der Beusch der alten Dame;* Ödön von Horvath, *Jugend ohne Gott.* Emphasis is placed on reading, comprehension, vocabulary building, and oral work.

40—123 **German Literature**
Five prepared class periods. Introduction to German Literature. This course prepares for the Advanced Placement Examination. Through detailed stylistic analysis of a number of outstanding works, the students gain an acquaintance with some of the major authors and most significant trends in German literature since 1750. The works read include Brecht, *Der kaukasische Kreidekreis;* Büchner, *Woyzeck;* Dürrenmatt, *Die Physiker;* Hauptmann, *Bahnwärter Thiel;* Hesse, *Siddharta;* Kafka, *Die Verwandlung;* Mann, *Tonio Kröger;* and selected poems from Goethe to the present.

50—123 **German**
Four prepared class periods. Contents vary according to the needs and interests of the students.

60—123 **German**
Four prepared class periods. Contents vary according to the needs and interests of the students.

Senior Project
Under the guidance of a member of the German Department, a Senior has the opportunity to do special work in German. It may include supervised teaching of an elementary class or work of his own choice in a special field.

Italian

10-20—0 **Italian**
Five prepared class periods. Open to Seniors. Open to Uppers by permission of the instructor. A year-long accelerated introductory course covering two years in one. Because students usually come with a background in other languages, progress in speaking, reading, and grammar is quite rapid.

Russian

The Russian Department offers a course of five years of study. An accelerated sequence enables able students to complete four years' work in three, and receive four years of credit. There is also an accelerated course for Uppers and Seniors.

Since Russian is, indeed, more "foreign" to native speakers of English than the traditional languages of Western Europe, the complete exclusion of English during the first term is impractical. However, it is the policy of the Russian Department to attain the exclusive use of Russian in the classroom, instructional and conversational, no later than midway through the first year's study, and from the first meeting of the accelerated sequence *(12)*. The entire program develops skill in speaking, aural comprehension, reading, and writing.

10—0 **Russian**
Five prepared class periods. Open to Juniors, Lower Middlers, and Upper Middlers. A year-long elementary course in speaking, listening, reading, and writing. Texts: von Gronicka, *Essentials of Russian* (Prentice Hall); Bash, *Uchebnik Russkovo Iazyka,* Part I; Reference materials.

12—23 **Russian (T2)** (a two-term commitment)
Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *Russian 10.* Successful completion of two terms of *12* enables one to enter *22.* Texts are essentially the same as those used in *Russian 10* and *Russian 20.*

10-20—0 **Russian**
Five prepared class periods. Open to Seniors. Open to Uppers by permission of the instructor. A year-long accelerated introductory course covering two years in one. Texts: *ALM Russian Level One* and *Two* (Harcourt); *Graded Russian Readers* (Heath).

20—0 **Russian**
Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: von Gronicka, *Essentials of Russian* (Prentice Hall); Bash, *Uchebnik Russkovo Iazyka,* Part I; Reference materials, and selected literary materials.

22—0 **Russian**
Five prepared class periods. A year-long accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30.*

30—0 **Russian**
Four prepared class periods. Reading, conversation, and writing, based on a variety of authors. Texts: S. Khavronina, *Russian as We Speak It* (Progress-Moscow); Bash, *Uchebnik Russkovo Iazyka,* Part 2, and selected Soviet literary materials.

40—123 **Russian**
Four prepared class periods. Fall Term, further work in reading, conversation, and writing. Texts: L. Muravyona, *Verbs of Motion in Russian* (Progress—Moscow), and selected Soviet literary materials.

Winter Term, THE SOVIET PRESS. A view of the Soviet system as reflected in the media. The text is a subscription to a major Soviet newspaper.

Spring Term, SOVIET PROTEST LITERATURE. The development of protest in the Soviet Union as seen through the works of Zamyatin, Solzhenitsyn, Tertz, Daniel, Yevtushenko, Okudzhava and others.

50—123 **Russian**
Four prepared class periods. Contents vary according to the needs and interests of the students.

Senior Project
Under the guidance of a member of the Russian Department, a Senior has the opportunity to do special work in Russian. It may include supervised teaching of an elementary class or work of his own choice in a special field.

For courses in translation, see the Interdisciplinary section, p. 33.

Spanish

The Spanish Department offers a sequence of four years; able students, by accelerating after the first year, may complete five courses. The aim is to have the students understand the language and speak it fluently. Spanish is used constantly in the classroom. The students learn to read and write the language with ease, and are given a comprehensive introduction to the literature and culture of Spanish and Hispanic America.

10—0 **Spanish**
Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. The basic texts are: *Español: A Descubirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill) and *Cuaderno de Ejercicios,* by Schmitt, Woodford and Marshall (McGraw-Hill). They are supplemented by language laboratory practice and other audio-visual materials. Exercises and reading and writing are introduced after the student has acquired confidence in oral expression.

10-20—0 **Spanish**
Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence. The basic texts are *Español en Español,* by A.A. Graupera and F. Pace (Van Nostrand Reinhold Co.); *Gramática Española de Repaso,* by F. Ugarte (The Odyssey Press), and selected readings. Past readings have included such books as: *Cuentos Americanos,* ed. D. D. Walsh (Norton); and *Lluvia roja,* by Jesús Goytortua (Appleton-Century-Crofts).

15—0 **Spanish**
Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20.* The course stresses the oral use of the language. Outstanding performance in this course qualifies the student for *Spanish 22* or *Spanish 30.* Text: *Español en Español,* by A.A. Graupera and F. Pace (Van Nostrand Reinhold Co.) and selected readings. Past readings have included: *Cuentos Americanos,* ed. D.D. Walsh (Norton).

20—0 **Spanish**
Five prepared class periods. A continuation course that emphasizes speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Español: A Sentirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill). Readings beyond the basic text are selected to meet the needs of each class.

22—0 **Spanish**
Five prepared class periods. Open to students who have completed *Spanish 10* with honors and those who can earn honors through the Fall Term of this course. It covers the equivalent of the material of *Spanish 20* and *30.* Successful completion enables a student to enter *Spanish 40* or *42.* The basic texts are: *Español: A Sentirlo,* by Schmitt, Woodford and Marshall (McGraw-Hill); *Cuentos Americanos,* ed. Walsh (Norton); and selected readings. Past readings have included: *En la ardiente oscuridad,* by Buero Vallejo (Scribner's); *El sombrero de tres picos,* by Alarcón (Macmillan); and *Doña Perfecta,* by Pérez Galdós (Dell Publishing Co.).

30A—0 **Spanish Language Review**
Four prepared class periods. For students who have successfully completed *Spanish 20,* but have need of further reinforcement in basic language structures. In addition to an intermediate grammar text, readings are selected according to the needs of the students.

30—123 **Aspectos de la cultura y civilización del Mundo Hispánico**
Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written composition through a social-studies approach to the culture and civilization of the Hispanic world.

32—123 **Spanish**
Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written expression. Class discussion is based on representative works of literature to be found in the Spanish speaking world.

40—123 **Spanish**
Four prepared class periods. The purpose of the course is to further the student's interest in the Hispanic world through the study of its history and literature. Texts used in the past have been: *Tesoro Hispánico,* ed. Lado et al. (McGraw-Hill); *El Burlador de Sevilla,* by Tirso de Molina (Taurus Ediciones); *Doña Bárbara,* by Rómullo Gallegos (Fondo de Cultura Economica); *Poesiá Hispánica,* by A.A. de Del Rió (Holt, Rinehart and Winston).

42—123 **Spanish**
Five prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a fairly fluent ability in conversation. Constant use of the Spanish language in the classroom discussions and written assignments are required. Particularly able students may take the Advanced Placement Examination if they so desire. Texts: Representative works of Pérez Galdós, Unamuno, F. Garciá Lorca, J.L. Borges, Pablo Neruda, and supplementary titles chosen to support the study of these major authors.

52—123 **Spanish**
Five prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *42,* or with the permission of the instructor. The emphasis of this course is based on a study in depth of two significant authors each term. In the past the following texts have been used: *Cien años de soledad, La Malahora,* by Garciá Márquez (Editorial Sudamericana, Buenos Aires); *Historia universal de la infamia,* by Borges (EMECE, Argentina); *En torno al poema,* ed. Garciá Montoro and S.A. Rigol (Harcourt Brace, World); *Tres novelas ejemplares, y un prólogo,* by Unamuno (Austral); *Yerma* and *La casa de Bernarda Alba,* by Garcia Lorca (Losada);

Cantos de vida y esperanza, by Rubén Darió (Austral); *La familia de Pascual Duarte,* by Camilo José Cela (Appleton-Century-Crofts); *El árbol de la ciencia,* by Pió Baroja (Alianza Editorial); *Sonatas,* by Valle Inclán (Austral); and outside reading.

60—123 **Spanish**
Four prepared class periods. Contents vary according to the needs and interests of the students.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of Music, which is satisfied by *The Nature of Music (Music 20).* This course is also a prerequisite for courses in the History and Appreciation category, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the academy; *Music 20* or its equivalent. Entering Seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

Applied

10—1 **Beginning Instruments**
10—2 Three prepared class periods. Open to Juniors, Lower Middlers, and Upper Mid-
10—3 dlers. Each section of instruments meets three times a week. On non-class days individual practice is required. Each section is taught separately without mixing woodwinds, brass, or strings. After completion of the course, a student should be able to progress to individual private instruction. Instruments taught: flute, clarinet, trumpet, trombone, tuba, and orchestral strings. Limited enrollment.

A fee of $10 per term is charged for rental of school-owned instruments.

11—123 **Recorder Ensemble**
Meeting four times a week, with outside preparation. Prerequisite: *The Nature of Music (Music 20),* or permission of the instructor. Open to all classes.

This course is designed for the continuation of recorder skills developed in *Music 20.*

12—123 **Brass Ensemble**
Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. The group has an opportunity to perform in Chapel and in other concerts. The ensemble is made into different types of groups, such as trios, quartets, quintets, and double brass choirs, to perform Renaissance, Baroque, and contemporary brass literature.

13—123 **Woodwind Ensemble**
Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. The ensemble is organized to allow a unique and comprehensive experience in the study and performance of chamber music repertory, in varied sizes of ensembles. Playing chamber music is an essential part in the development of the woodwind student.

14—123 **String Ensemble**
Meeting three times a week, with outside preparation. Open to all classes. Oper to qualified intermediate or advanced players by permission of the instructor. These students find a wealth of fine music written for various combinations of

instruments, ranging from the relatively easy to the very difficult. Over the centuries composers have considered the strings a favored group. Chamber music is a particularly rewarding experience and is valuable training for all string students.

15—123 **Fidelio Society**
Pass/Fail. Three prepared periods. Open to all classes. This small group of mixed voices is selected from the *Chorus (Music 17)*. It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*.

16—123 **Band**
Four prepared periods. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating. Volunteers from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given.

17—123 **Chorus**
Four prepared periods. Open to all qualified students. The *Chorus* is the academy's major singing group, comprised of mixed voices, and performs a variety of choral works, both sacred and secular. No previous choral experience is necessary; just a desire to work hard and enjoy a unique choral experience.

18—123 **Chamber Orchestra**
Four prepared class periods. Open to all classes. Most of the music played is for string orchestra; the best winds in the school are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate.

19—123 **Private Instrumental and Vocal Lessons**
Weekly instruction in keyboard, orchestral, and band instruments in classical guitar, or in voice. For private instruction, covering piano, organ, voice, classical guitar, orchestral and band instruments, there is a separate charge of $65 per term for half-period instruction, or $130 per term for full-period lessons and a nominal fee for the use of practice pianos and organs. A fee of $15 per term is charged for private rental of school-owned instruments.

20—1 **The Nature of Music**
20—2 Four prepared class periods. This course is designed to give a general back-
20—3 ground in the history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students receive some first hand experience with musical instruments. No previous experience in music is required.

History and Appreciation

The following sequence of courses in the history and literature of music is team-taught by members of the department. The sequence takes one and two-thirds years to complete. A course on *Twentieth Century Music* will be given in the Fall Term 1977. The sequence will be offered again, beginning with *Medieval and Renaissance Music* in the Winter of 1978. Each course is term-contained.

The Nature of Music, (Music 20) is a prerequisite for all courses in this section.

22—2 **Medieval and Renaissance Music (to 1600)**
Four prepared class periods. Open to all classes. This course surveys what is commonly called Early Music, from the earliest known chant to the fully developed Renaissance motet and madrigal. Much of the music from this period was written "for the glory of God." But the secular side of things is considered, too, especially the rise of instrumental music (for harpsichord, recorder, etc.) and the madrigal, with its texts of love, nature, and humor. (Not offered in 1976-1977)

23—1 **Baroque Music (1600-1750)**
Four prepared class periods. Open to all classes. This course surveys music from the first opera to the late works of Bach and Handel. The grand, dramatic styles known as Baroque are seen in its most lavish form, opera, in choral masterpieces such as the *Messiah*, in sacred music such as Bach's organ works, and in instrumental music such as the Brandenburg Concertos. The settings for this music, from the relatively humble churches of Bach's Leipzig to the magnificent Palace of Versailles are considered.

24—2 **Classical Music (1750-1820)**
Four prepared class periods. Open to all classes. In this relatively short period grew and flourished what is considered the Classical style of Western music, and with it came the newly-created symphony. Haydn, Mozart, Beethoven, and others wrote in this new form as well as composing concertos, sonatas, string quartets, and some of the older forms, such as opera and religious music. The historical backdrop to this music—the Enlightenment, the Revolution (American and French), and the Napoleonic Era—are also considered.

25—3 **Romantic Music (1820-1900)**
Four prepared class periods. Open to all classes. The Romantic period is an era of great social, economic, and political change. From the later works of Beethoven through the works of Debussy, we trace the development and change of the "classical" structures. Schubert, Schumann, Mendelssohn, Brahms, Chopin, Liszt, Berlioz, Wagner, Mahler and Strauss are some of the composers that are examined.

26—1 **Twentieth Century Music (1900-Present)**
Four prepared class periods. Open to all classes. The twentieth century is a period of abstraction, and reaction, in art and music. New rhythmic and harmonic languages were developed and used. This course traces the development of the twentieth century style through the works of Debussy, Ravel, Scott Joplin, Stravinsky, Bartok, Ives, Schonberg, Partch, and other major figures in the twentieth century music world. (Not offered in 1976-1977)

27—123 **Independent Study in the History and Literature of Music**
Four prepared class periods. Open to Upper Middlers and Seniors. A student who has taken at least one of the other courses in this sequence may, with the permission of the instructor, pursue an independent course of study in either a particular type of music or a particular period of music. This should be related to the period or periods covered in the student's previous course work in this sequence.

28—123 **Jazz**
Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, its spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W.C. Handy, Jelly

Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

29—1 **Music of America**
Four prepared class periods. Open to all classes. This course examines two strong traditions in music of America: that of the American Indian and the folk music of the Afro-American.

30—2 **Music of Africa and the Mid-East**
Four prepared class periods. Open to all classes. This course examines the culture, through music, of both African and Mid-Eastern countries.

31—3 **Seminar on Eastern Music**
Four prepared class periods. Open to Upper Middlers and Seniors. This seminar on Eastern (Asian) Music is a series of class discussions led by several visiting faculty members and students on different aspects of culture, through music, of the Eastern World.

Theory

32—123 **Orchestration and Conducting**
Hours to be arranged. Open to Upper Middlers and Seniors. A comprehensive study of orchestral instruments and their use in this organization. This course is designed to teach arranging for each instrument. Also, basic conducting skills are covered.

33—1 **Theory of Music I**
Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 **Theory of Music II**
34—3 Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—1 **Theory of Music III**
35—3 Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music II* or permission of the instructor. This course includes advanced figure bass, more complex chords, and a brief introduction to 19th and 20th century techniques.

36—123 **Electronic Music**
Four prepared class periods. Prerequisite: *The Nature of Music (Music 20)* or permission of the Department Chairman. A course for the benefit of those who seek to expand their domains of creativity by understanding and utilizing the conceptual approaches inherent in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules.

40—123 **Advanced Techniques in Electronic Music**
Four prepared class periods. Prerequisite: *Electronic Music (Music 36)*. A course designed for the continuation of the skills and techniques developed in *Music 36*.

erforming Arts

All courses are electives, open to Seniors, Uppers, and Lowers, but to Juniors only with permission of the instructor, unless otherwise noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experiences is available:

some courses are performance-oriented; some are theory-oriented; some are both. Theatre students are encouraged—but not required—to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which for four years has become part of an exchange program with schools in England, touring with *Our Town, Harvey, The Fantasticks,* and *Scenes from American Life* during spring vacation.

Theatre Courses

20—1 **Introduction to Theatre**

20—2 Four class periods. Open to all classes. Using both classical and modern scripts to provide a range of dramatic experiences, the class studies plays in depth and detail to see how they might be acted, directed, and staged, beginning with script analysis and ending with the staging of scenes and the design and construction of sets and props. Playwrights who might be studied are Miller, Wilder, Shakespeare, Guare, and Brecht, but the choice of plays depends largely upon the interests of the students. The course is intended for students with limited experience in high school theatre and serves as an overview of the major areas of theatre: acting, directing, design, and lighting, each of which might be studied in depth in subsequent courses. (Mr. Bellizia)

21—1 **Introduction to Acting**

21—3 Four class periods. Open to all classes. This course is designed for students with little or no acting experience. By doing exercises, reading, improvisations, and scenes from a wide variety of sources (including perhaps Shakespeare, musical comedy, modern plays, and short stories), a student who is curious about the theatre may determine whether he or she has ability or interest in acting. The emphasis is on the variety of acting experiences rather than on a polished final product. Videotape and tape recorders are available for use as study tools.

22—2 **Public Speaking**

22—3 Four class periods. Open to all classes. The course has a dual objective: to learn how to speak easily in front of others, and to learn how to speak English well. Students give prepared and extemporaneous speeches on a variety of topics while studying diction, pronunciation, projection, and other techniques of public speaking.

23—2 **Acting Workshop**

Four class periods. A theoretical and practical consideration of various acting styles, both classical and contemporary, for students with some acting experience, this course employs acting exercises, theatre games, improvisation, and scenes from plays to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he may remove himself from himself (Mr. Bellizia).

24—3 **Scene Study**

Four class periods. Prerequisite: *Theatre 20* or *21,* or significant production experience. For serious, self-motivated students of acting who wish to study one play and one character in depth, this course might be taken in conjunction with the playing of a role in a musical or dramatic production.

25—1 **Directing Workshop**

Four class periods. Dedicated to the idea that the director's job is the most complex in theatre, the course is designed for students who have had some acting experience and who now wish to study the art of directing. Class members experiment with manageable scenes and short plays which they direct; they examine books on the subject (such as Peter Brook's *The Empty Space* and Cole and Chinoy's *Directors on Directing*) and play scripts, and various styles of direction, interpretations of scenes, and types of drama from classical and contemporary

periods. Emphasis is placed on the responsibilities of the director: to his actors, his audience, and his playwright. (Mr. Bellizia)

26—3 **Stagecraft**
Four class periods. Open to all classes. Through practical experience in designing, building, and lighting for plays currently being produced, students learn the elements of stagecraft, including set construction, stage rigging, and the use of lighting instruments and gels. Text: Parker and Smith, *Scene Design and Stage Lighting*.

27—3 **Play Production**
Four class periods. Open to all classes. Prerequisite: any other Theatre course or significant production experience. This course is oriented toward a performance at the end of the term of a group acting, directing, and design project. The specific text depends somewhat upon the ability of the group, but recent choices have favored the production of dramatic works such as *The Crucible* and *The Skin of Our Teeth*. (Mr. Owen)

28—2 **Shakespearean Workshop**
Four class periods. Open to all classes. An intensive study of several plays by Shakespeare, with the major emphasis on the spoken word. Close attention is given to pronunciation, diction, rhythm, dynamics, and interpretation. Students read aloud, act out, memorize, present, and record scenes and soliloquies.
See English 508 for a course in Modern Playwrights.

29—2 **Playwriting**
Four class periods. Each student is expected to write at least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by Sophocles, Shakespeare, Goldsmith, Ibsen, Williams, Miller, Becket, and Ionesco, and selected literary criticism focused on drama. (Mr. Owen)

)ance

30—123 **Introduction to Dance**
Four prepared class periods. A formal course in movement and composition which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance.

hysical Education

All new Juniors and new Lowers are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

10—1 **Physical Education**
10—2 Pass/Fail. Limit of fifteen students per section. Four morning class periods per
10—3 week. The program consists of four phases:
1. Track—a run, jump, throw, self-developing program;
2. Ropes—elementary gymnastics and climbing;
3. Physical Fitness—an introduction to physical conditioning and weight training
4. Drownproofing—a survival technique, swim course.

Two periods per week are spent on Drownproofing and two on the other three phases.

Psychology

The Psychology Department offers four term-contained courses as electives.

10—1 **Human Awareness**
10—2 Pass/Fail. Two double periods. For Juniors and Lowers. Limit of fifteen students per section. A course in human awareness in which the students explore the relationship of their thoughts and feelings to their behavior with other people. Topics explored cover a wide variety of dilemmas encountered in all group experience including dilemmas of membership, isolation, communication, and leadership. These topics are related directly to the experience of living in a boarding school and to the feelings and frustrations that develop in making the personal choices and setting the personal boundaries that are a part of being an individual in a complex world. (Ms. Perrin)

30—1 **Human Relations**
30—3 Pass/Fail. Two double periods. For Uppers and Seniors. Limit of fifteen students per section. This is a course in Social Psychology. Its topic for study is human behavior in small groups. Human beings do most of their living, working, and playing in small groups ranging in formality from family to classroom groups. The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goals. These stages and processes are a response to two basic human needs: the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other.

The classroom group provides students with a laboratory in which to observe group process. Members read articles in the professional literature and write papers on topics that reflect upon their own experience. (Mrs. Kubler-Merrill and Dr. Roehrig)

31—1 **Human Sexuality**
31—2 Four prepared class periods. An interdisciplinary course for Uppers and Seniors
31—3 designed to help students understand the facts of their own sexuality from the biological, social, and psychological points of view. The format of the course is a combination of reading, lecture, discussion, writing and examination. In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, important features of masculine and feminine psychology as they relate to sexual behavior, the relationships between attitudes and beliefs, and sexual conduct.

32—1 **Introductory Psychology**
32—2 Four prepared class periods. For Upper Middlers and Seniors. An introductory
32—3 survey of the diverse methodologies and philosophies that fall into the broad category of "Psychology". The aim of the course is to introduce the student to the many varieties of Psychological inquiry. Some of the areas covered are: Conditioning and Learning, Cognitive Development, Animal Behavior, Social Psychology, and Personality Theory. The format of the course is a combination of lectures and discussion. A basic text, *Psychology Today: An Introduction*, is used as well as Calvin Hall's *A Primer of Freudian Psychology* and supplementary reprints from research journals. (Ms. Perrin)

Religion and Philosophy

All courses are elective. The courses in religion and philosophy are intended to introduce students to some of the fundamental questions arising out of human experience. Courses at all levels attempt to develop and combine a capacity for critical analysis and a sensitive appreciation of various beliefs and values. They further seek to point to the possibility and the significance of relating religious and philosophical experience and insight to the problems of everyday living. The source materials are therefore drawn from secular writing and art forms as well as the forms of expression traditionally viewed as sacred.

Religion

20—1 **The Religions of Man: A Literary Perspective**
20—2 Four prepared class periods. Open to Juniors and Lower Middlers. The course provides an introduction to five of the world's major religions: Buddhism, Hinduism, Judaism, Islam, and Christianity. Literary works by such authors as Hesse, Potak, Wiesel, Unamuno, and Lewis provide focus for discussion of how an individual character, in his particular religious tradition, deals with his search for authenticity. Huston Smith's classic text, *The Religions of Man,* is used to provide basic information. (Ms. Nolan)

30—2 **An Introduction to Man's Religions: A Literary Perspective**
30—3 Four prepared class periods. Open to Upper Middlers and Seniors. This course, organized similarly to *Religion 20* provides at somewhat greater depth an introduction to some of the world's major religions. Literary works by such authors as Hesse, Potak, Wiesel, Unamuno, and Lewis provide focus for discussion of how an individual character, in his particular religious tradition, deals with his search for authenticity. (Ms. Nolan)

31—1 **The Old Testament —An Introduction**
31—2 Four prepared class periods. Open to Upper Middlers and Seniors. This intro-
31—3 ductory course in the Old Testament gives the student an opportunity to become familiar with one of the oldest and greatest works in all of literature. The historical setting of the biblical writings and the religious ideas and conceptions presented are considered. (Not offered in 1976-1977)

32—1 **The New Testament**
32—2 Four prepared class periods. Open to Upper Middlers and Seniors. An intro-
32—3 ductory course in the New Testament providing an analysis of the *Gospels of Matthew, Mark, Luke,* and *John; The Letters of Paul;* and *The Book of Revelation.* (Mr. Warren)

33—1 **Changing Images of God and Man**
33—3 Four prepared class periods. Open to Upper Middlers and Seniors. In Genesis, we are presented with the Creator who walks in the Garden with Adam and Eve. In the 18th century, the Deists, children of the Enlightenment, thought of God as a watchmaker, who once having set the watch in motion, leaves man to his own devices. In both of these examples, there are particular issues as to how man stands in relation to his God. The course investigates the implications of these and other images, using primary source materials to study how the changing images of God and man correspond to major movements in western history and philosophy. (Ms. Nolan)

Ethics

40—1 **Contemporary Ethics**
40—2 Four prepared class periods. Open to Upper Middlers and Seniors. The course
40—3 focuses on man's contemporary ethical-moral dilemmas, with attention to his ability to form deep personal relationships, to relate to his technosocial environ-

ment and himself. Readings include *Art of Loving,* Fromm; *The End of the Road,* Barth; *A Clockwork Orange,* Burgess; *Future Shock,* Tofler, etc. (Mr. Warren)

42—1 **Law and Morality: A Study in Political Philosophy**
42—3 Four prepared class periods. Open to Upper Middlers and Seniors. This course consists of a critical examination of an intricate web of problems concerning the relationship between law and morality. Some of the major questions asked are (1) Does society ever have the right to legally restrict an individual's private (moral or immoral) behavior? (2) How much, if any, of "popular" morality should society incorporate into law? (3) Is one ever morally justified in breaking a law? If so under what circumstances? (4) Should there be laws at all? Readings from Plato, Thomas Hobbes, J.S. Mill, Lord Patrick Devlin, O. W. Holmes, Abe Fortas, M.L. King, Jr., and Ayn Rand. (Dr. Flanagan)

43—2 **Ethical Issues in the Sciences**
Four prepared class periods. Open to Upper Middlers and Seniors. The number of scientifically related ethical issues has increased significantly in recent years with the growth of the human *sciences* and their corresponding *technologies.* Biological research has spawned the technologies of population control, life prolongation, and genetic engineering. Psychological and Neurophysiological research has given birth to the technologies of psychotherapy, behavior modification, and psychosurgery. And a slew of difficult ethical problems has arisen in the wake of these astounding developments: Is one morally justified in attempting to extend human life when famine and overcrowding are already resulting from the excessive number of living human organisms? Or does one have a moral duty to do anything possible to save or prolong a human life? For that matter do I have a right to choose not to have my life medically or surgically prolonged? Is one ever morally justified in tampering with natural genetic processes? If so under what circumstances? Is one ever morally justified in deliberately attempting to modify the behavior of another individual? Is psychosurgery morally justified? If so who decides when it is justified? The course consists of a critical examination of these and related problems concerning the morality of implementing the human technologies. Readings include texts and articles on abortion, euthanasia, population control, behavior modification, genetic engineering, and psychosurgery. (Dr. Flanagan)

Philosophy

50—1 **Existentialism and Philosophy**
50—2 Four prepared class periods. Open to Upper Middlers and Seniors. A lecture and
50—3 discussion course concerned with human values. Readings and discussions deal with the Existential positions. (Mr. Hodgson)

51—3 **The Existence of God**
Four prepared class periods. Open to Upper Middlers and Seniors. This course is aimed at critically assessing the most fundamental presupposition of religion, namely, *that God exists.* The inquiry is carried out by critically examining (1) traditional philosophical attempts to prove or disprove the existence of God; (2) the view that religious utterances are nonsense; (3) the view that religion is simply morals with illustrative tales—tall and not so tall; (4) the view that belief in God is incompatible with science; (5) the view that men believe in God not because it is rational to do so but because they are insecure or prone to project ideal images of themselves; (6) the view that people are subtly coerced to believe in God by society since it has found religion to be an extremely effective means of controlling individual behavior. Readings from J. Hick, *The Existence of God;* W. James, *The Will to Believe;* B. Russell, *Why I am not a Christian;* S. Freud, *The Future of an Illusion.* (Dr. Flanagan)

52—2 **Contemporary Philosophies of Man**
Four prepared class periods. Open to Upper Middlers and Seniors. The course consists of a critical examination of the views of man offered by contemporary

existentialism, psychoanalysis, behaviorism, libertarianism, and anthropology. Some of the major questions to be asked are: What is the nature of man? What are his basic needs, rights, obligations, and values? What is the purpose of life? Is man innately aggressive? Is man free? Is he responsible for his actions? Given an understanding of man's nature how should we structure society to satisfy his needs and take advantage of his potentials. Readings: Frankl, *Man's Search for Meaning;* S. Freud, *The Future of an Illusion;* B.F. Skinner, *Walden II* and *Beyond Freedom and Dignity;* Ayn Rand, *Anthem;* K. Lorenz, *On Aggression*. (Dr. Flanagan)

53—1 **The Great Philosophers**
53—2 Four prepared class periods. Open to Upper Middlers and Seniors. The great
53—3 philosophers offer us a variety of sincere and systematic attempts to answer a set of very difficult questions which perennially face mankind: What is the good life? What is justice? What is knowledge? What is man? What is the relation between my mind and my body? Does God exist? This course critically evaluates the responses of Plato, Aristotle, Descartes, Hobbes, Berkeley, Hume, Kant and Mill to these questions in an attempt to show that both the questions and their answers continue to be relevant. (Dr. Flanagan and Mr. Hodgson)

ɔcience

The diploma requirement in Science is one year-long course in a laboratory science at the *20*-level or higher.

Juniors and Lower Middlers may pursue a three- or four-year sequence of science courses designed to provide an understanding of science and of scientific methods and thinking as part of a general education. The sequence also provides a sound foundation for later work in college; courses designated by the number *40* are more difficult than the regular ones, and admission is granted only to selected students. Some prepare for the Advanced Placement Examinations and consequently for advanced standing in college. Able students who have taken a regular course before their Senior year may prepare for the Advanced Placement Examinations by taking the *45* course for that subject. In addition, the *45* courses provide an opportunity for work to the student who plans further study in a particular field.

In general, students are encouraged to take a variety of courses and to acquire a broad background of knowledge in the different sciences rather than to specialize. For the student with special interests, individual projects are encouraged to the extent that they are consistent with safety, the equipment available, and the capacity of the student.

The *Science Courses 10-19* are open to Juniors and Lower Middlers. Able Juniors may elect courses at the *20*-level with permission of the Department Chairman.

Sience

Science **Science**
10—0 Five periods, three prepared. A laboratory course in beginning physical science using an expanded version of a syllabus called "Introductory Physical Science." Students explore the nature of matter in its solid, liquid, and gaseous forms. Analyses of mixtures and compounds, and a study of radioactivity lead to an atomic concept of matter. Many experiments are quantitative and require careful recording of data, drawing of graphs, and calculations of results. (Mrs. Whyte)

Science **Preparation for the Physical Science**
11—3 Pass/Fail. Four unprepared periods or two prepared periods per week. A course for Juniors or Lowers who are planning to take Chemistry or Physics the following year. Topics covered include the use of the slide rule, logarithms, exponential notation, significant figures, the metric system and dimensional analysis. There is laboratory work. (Dr. Minné)

Science **Earth Science**
12—2 Four prepared class periods. This course teaches some of the methods of inquiry in earth science. Through color slides, topographic maps, geological maps and aerial photographs, the student learns some of the elementary aspects of the earth's structure, stratigraphy, weathering, erosion, volcanism, and mineralogy. Some lab work is involved, emphasizing simple measurements and careful observations. (Dr. Wilson)

Science **The Solar System**
13—2 Four prepared class periods. The course surveys man's evolving theories of the planets and the solar system. For several weeks of the course, students consider some of the elementary physics and chemistry of astronomy. Sessions are scheduled in the school's observatory and a trip is made to the Museum of Science in Boston. (Not open to students enrolled in *Physics 30*.) (Mr. Sarton)

Science **History of Science**
14—2 Four prepared class periods. An introductory survey of the history of scientific thought from the early Greeks to the present century. Biographies of a number of men such as Galileo, Newton, Pasteur, Thompson, Michelson, Rutherford, and others as time permits, are read and discussed in context with their work and their contribution to the development of science. (Mrs. Whyte)

Science **Oceanography**
15—1 Four prepared class periods. This course consists of elementary physical oceanography and marine biology. There are two field trips, one to Gloucester to observe tidal zones and beach profiles and to collect specimens, the other to the New England Aquarium. (Mr. Cone and Dr. Wilson)

Science **Ecology (T2)** (a two-term commitment)
16—23 Four prepared class periods. Open to Juniors and Lower Middlers. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and inter-relationships within environment; population dynamics; trophic levels and energy; adaptation; succession; and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature. (Mrs. Hawkes)

Science **Introduction to Physics**
19—0 Four prepared class periods. Open to Juniors interested in an introductory course in physics which deals with the most fundamental topics of science from the smallest known particles to the known universe. Students entering this course should have mastered a year of algebra as it is used profusely in solving word problems. Successful completion of *Science 19* prepares students for *Physics 30* or *40*. This course also includes some work in the history of science. The main textbook is *Harvard Project Physics* augmented by outside readings.

Science **Energy and the Future**
30—2 Four prepared class periods. Open to Uppers and Seniors who have either completed or are completing the science requirement. This course is taught by faculty in the Science Division. Its purpose is to study energy in a modern biological, geological, physical-chemical, and social context. While several fundamental aspects of science and energy are inspected, a significant amount of time is devoted to issues that transcend mere technology. The course of study considers

fossil fuels, nuclear energy, solar, geothermal, wind, tidal, and other sources of energy, biological and ecological aspects of energy, public health, risks, costs, governmental policies and programs, demographic and moral considerations. The intent is that through the unifying theme of Energy, students can grasp a broader understanding of their world, as well as perhaps a further glimpse into the present and future of man. (Mr. Cone, Mr. Sarton, and Dr. Wilson)

Biology

30—0 **Biology**

Three prepared periods and one double, unprepared laboratory period. The course stresses the unity of life, rather than the diversity, by emphasizing the function common to all living things. It covers, in plants, animals, and microorganisms the fundamental principles of metabolism, including nutrition, gas exchange, transport, excretion, and homeostasis; responsiveness and coordination; reproduction, genetics, and development; the principles and history of evolution; and the principles of ecology.

The laboratory work includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. It requires careful observation, mastery of techniques, and accurate recording of results. Several laboratory periods are set aside for field trips featuring ecology and conservation. There is opportunity for work on individual laboratory projects.

43—2 **Biology**

Prerequisite: *Biology 30* or its equivalent. Three prepared periods and one double, unprepared laboratory period. This is a laboratory oriented course with investigations, to a great extent, designed by the students. It is designed around the basic philosophy that scientfic knowledge, whether gained through instruction, reading, or experimentation, is essentially conditioned and subject to constant modification as new information is acquired. This course is designed for students who have demonstrated an ability and interest in the science of biology and who have a strong desire to pursue their study in greater depth. Emphasis is placed upon the design and execution of experiments, the acquisition and interpretation of data and the careful formulation of conclusions.

44—1 **Biology**

44—2 Prerequisite: *Biology 30* or its equivalent. Three prepared periods and one double, unprepared laboratory period. Advanced level topics dealing with physiology and comparative anatomy. This course involves dissections of selected representatives of the animal kingdom with emphasis placed on the structure and function of various organ systems.

45—23 **Biology (T2)** (a two-term commitment)

Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Four prepared class periods and one double, unprepared laboratory period. In addition to a review of basic biology, new material is presented as the course progresses. The combination of review and new work prepares students for the Advanced Placement Examination of the College Entrance Examination Board.

Chemistry

20—0 **Chemistry**

Prerequisite: Completion of *Mathematics 13* or the equivalent. For Lower Middlers and Upper Middlers. Three prepared periods and one unprepared, double laboratory period. The course includes a systematic study of matter and the changes it undergoes. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 **Chemistry**
Prerequisite: Completion of *Mathematics 26* or the equivalent. Three prepared periods and one unprepared, double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 20*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation. These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers.

42—2 **Research in Chemistry**
Prerequisite: *Chemistry 20* or *Chemistry 30* completed with distinction, and permission of the instructor. One prepared period and three unprepared, double laboratory periods, or the equivalent. Each student selects a research project in consultation with the instructor and then carries out the necessary work. (Dr. Minné)

44—1 **Chemistry**
Prerequisite: Completion of *Chemistry 20* or the equivalent. Three prepared class periods and two unprepared, double laboratory periods. For students who wish to study chemistry further without trying to achieve advanced placement. This course is an introduction to stereochemistry, the study of the symmetry and shapes of organic and inorganic molecules. (Dr. Rees)

45—23 **Chemistry (T2)** (a two-term commitment)
Prerequisite: *Chemistry 20* or *Chemistry 30* completed with distinction. Four prepared periods and one unprepared, double laboratory period. The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board. In addition a course in physics should be taken prior to or concurrent with *Chemistry 45*.

48—0 **Chemistry**
Prerequisite: One year of Physics. Three prepared periods for recitation and two unprepared, double laboratory periods. This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board.

Physics

25—0 **Physics**
Five class periods, one unprepared. Open to Lower Middlers, Upper Middlers, and Seniors. An introductory course in the basic concepts of physics with emphasis on relativity and modern physics. A somewhat less rigorous course than *Physics 30*, it is designed for students who have had only one year of algebra and one year of geometry. Text: *Mainstream of Physics* by Bieser.

30—1 **Physics**
Five class periods, one unprepared. Designed for students with demonstrated ability in mathematics and science. *Physics 30-1* is a prerequisite for *Physics 30-23* (T2). Text: *College Physics*, by Miller. A study of mechanics, primarily classical mechanics, in some depth.

30—23 **Physics (T2)** (a two-term commitment)
Prerequisite: *Physics 30-1*. Five class periods, one unprepared. Winter Term: Wave motions, heat, and kinetic molecular theory. A study of wave motions includes sound and geometric and physical optics. Spring Term: Electricity, magnetism, electronics, atomic and nuclear physics.

40—0 **Physics**
Four prepared class periods and one unprepared double, laboratory period. An advanced course open upon invitation of the department to a small group of

students who are concurrently taking calculus and who have not previously studied elementary physics. A previous course in chemistry, though not required, is advisable. Lectures, recitations, and laboratory work are planned to prepare students for the Advanced Placement Examination in Physics of the College Entrance Examination Board.

45—12 **Physics (T2)** (a two-term commitment)
Five prepared class periods. Open to students who have completed a year of Physics and who have taken, or who are taking concurrently, a course in Calculus. The Fall Term course is essentially a course in modern physics. Part of the Winter Term is used in preparation for the Advanced Placement Examination. Some advanced laboratory work is done during the Fall Term.

50—3 **Relativity and Quantum Mechanics**
Prerequisites: *Physics 30* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course. (Dr. Perrin)

Special Science Courses

Animal Behavior 30—1 30—3 **Animal Behavior**
Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Three prepared class periods and one unprepared double laboratory period. The course is designed to familiarize the student with the basic principles of animal behavior. The topics which receive the greatest emphasis are: territoriality, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Readings from *On Aggression, The Territorial Imperative*, and "Scientific American" reprints are included.

Astronomy 30—1 **Observational Astronomy**
Four prepared class periods. Astronomy is one of the few sciences left that the amateur can enjoy while still making meaningful contributions to the field. This course exposes students to observing the heavens with the unaided eye, binoculars, and telescopes. Classes are scheduled in the Observatory three nights each week. Students identify constellations, track asteroids and planets, and learn how to observe using a telescope. Limit of 12 students. (Mr. Sarton)

Astronomy 35—3 **Topics in Modern Astronomy**
Four prepared class periods. This course concentrates on subjects of popular interest, including constellation identification, the planets, evolution of the universe, and life beyond earth. This course is for students interested in a rigorous but non-technical treatment of astronomy. (Not open to students who have taken *Science 13*.) Special sessions are scheduled in the Observatory. (Mr. Sarton)

Ecology 31—1 31—3 **Introduction to Ecology**
Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Three prepared class periods and one double, unprepared laboratory period. Early emphasis is on the concepts of the ecosystem, energy flow, material cycling, succession and relations within and between populations. These fundamentals are then applied to problems of human ecology such as overpopulation and air and water pollution. Topics explored cover a wide range of environmental problems related to living in the modern world and guide the student toward a greater understanding of his effect as a human being on the balance of nature. The course content, rather than being rigid, embodies flexibility in that students are encouraged to address themselves to aspects of environmental concerns that they find of particular interest. Correlated with classroom studies, the laboratory investigations include analysis of environmental pollutant,

relationships in communities and computer simulations of population growth as well as pertinent field trips.

Geology **Geology**

34—3 Three prepared class periods and one double, unprepared laboratory period. This is the equivalent of a one semester college course in physical geology. The laboratory work deals with rocks and minerals from the Academy's collection of several hundred specimens, geologic maps, topographic maps and aerial photographs. Enrollment is limited to a dozen students (first preference to Seniors) in order to accommodate transportation on field trips. Prerequisite: prior fulfillment of the science requirement. (Dr. Wilson)

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Andover, Massachusetts

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Catalog 1977–78



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Phillips Academy
Andover, Massachusetts

CALENDAR 1977-78

Fall Term

September 17, Sat	New Students Arrive
September 19, Mon	Old Students Return
September 22, Thurs	Classes Begin
November 23, Wed	Thanksgiving Break begins, 12:50 p.m.
November 27, Sun	Thanksgiving Break ends, 6 p.m.
December 2, Fri	Fall Term classes end
December 6, Tues	Exams begin
December 9, Fri	Exams end — vacation begins, 12 noon

Winter Term

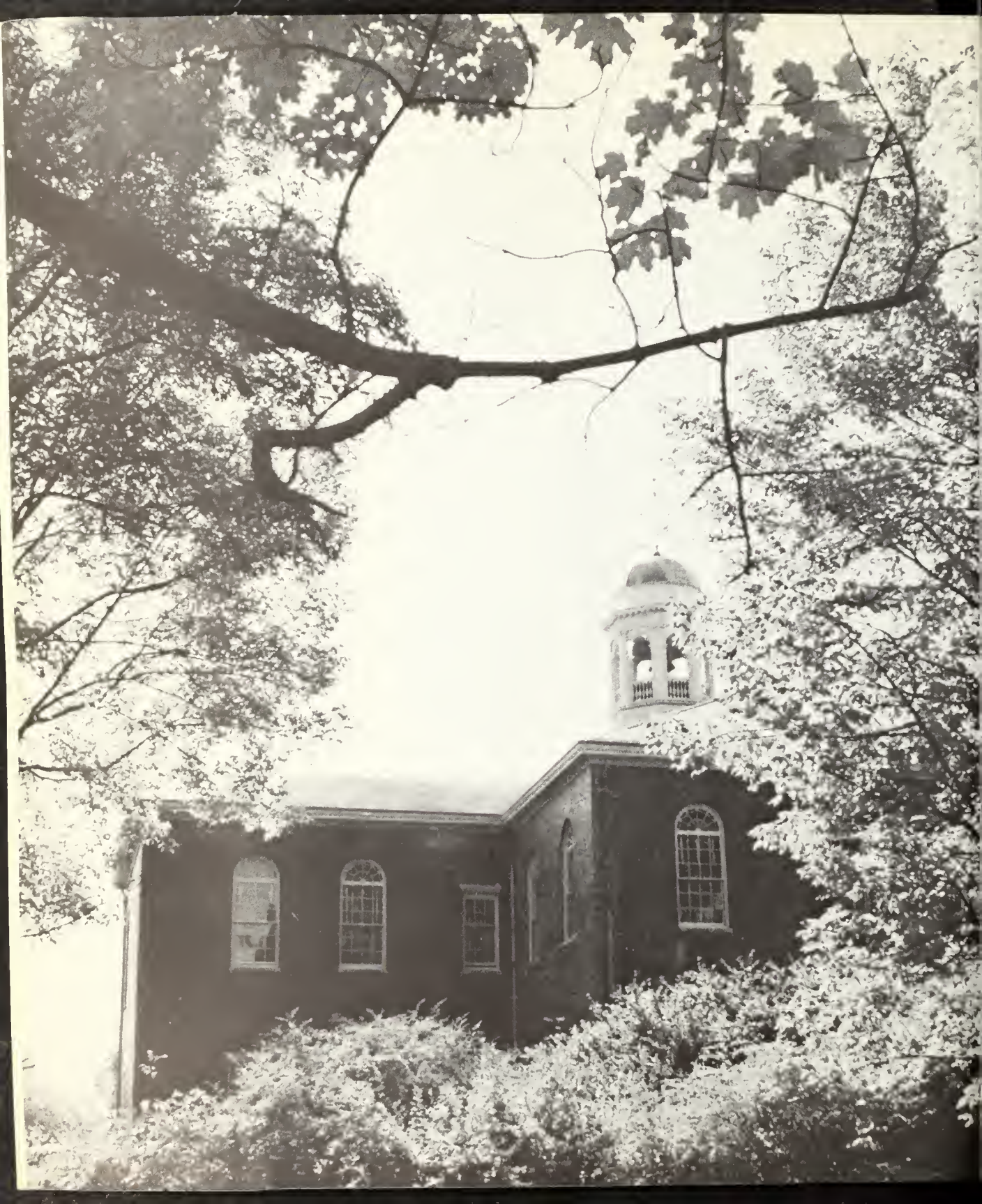
January 3, Tues	Students return by 8 p.m.
January 4, Wed	Classes begin
March 7, Tues	Winter Term classes end
March 8, Wed	Exams begin
March 11, Sat	Exams end — vacation begins, 12 noon

Spring Term

March 27, Mon	Students return by 8 p.m.
March 28, Tues	Classes begin
May 31, Wed	Spring Term classes end, 12:50 p.m.
May 31, Wed	Bicentennial Celebration begins
June 4, Sun	Commencement



Phillips Academy, Andover, Massachusetts, better known as Andover, is an independent, coeducational, integrated and non-sectarian institution offering a variety of academic programs for high school students.



Contents

7 INTRODUCTION TO ANDOVER

11 ANDOVER LIFE

27 THE ACADEMIC DEPARTMENTS
28 The Arts
31 Classics
31 Greek
31 Latin
31 English
33 History and Social Science
34 Mathematics
35 Modern and Foreign Languages
35 French
35 German
36 Russian
36 Spanish
37 Religion and Philosophy
37 Science
37 Archaeology
37 Biology
38 Chemistry
38 Physics
39 Psychology

41 COMPLEMENTARY PROGRAMS
41 Complementary Schools Project
41 The Andover Summer Session
41 The Short Term Institutes
42 School Year Abroad
43 National Network of Complementary Schools
43 Other complementary programs

45 ATHLETICS

47 HEALTH CARE

48 TUITION AND EXPENSES

49 FINANCIAL AID

50 ADMISSIONS
51 The four steps for application
51 Secondary School Admissions Test
51 Senior Class Candidates
52 Whom to contact at Andover
52 Early decision

52 ALUMNI REPRESENTATIVES
52 Admissions interview schedule

63 TRUSTEES

64 ADMINISTRATION AND FACULTY

73 STATISTICAL INFORMATION
73 Geographical distribution
74 College Admissions
75 College matriculations for the Class of 1976

76 MAPS
76 Campus map
78 Regional map

79 INDEX

81 PRELIMINARY APPLICATION FORM



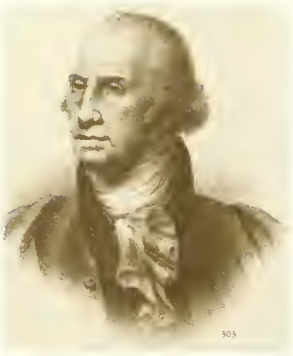
PHILLIPS ACADEMY IN 1778.

Introduction to Andover

In an old carpenter's shop, "fitted up temporarily for school purposes," thirteen pupils gathered to meet Master Eliphalet Pearson and hear a dedicatory sermon by the Reverend Jonathan French. The date was April 30, 1778, and the Phillips School of Andover was begun. There was little reason to believe the future held bright promise that Thursday morning two hundred years ago, for both our school and the young nation of which it was a part existed more in the hopes of their founders than in reality. Indeed there was a certain audacity in venturing any new enterprise at a time when the war with England was going badly and there was, as yet, no stable government for the new American nation. But twenty-six-year-old Samuel Phillips, Jr. had set about convincing others that the times required just such a venture as the Phillips School. He wrote, "upon the sound education of children depends the comfort or grief of parents, the welfare or disorder of the community, the glory or ruin of the state. The present public ignorance gives rise to a fear of events the most dreadful. . . ."

Our modern Phillips Academy bears little physical resemblance to its origins, but it is striking how strong the threads of continuity are with the ideals and even the government set forth by the founders. The emphasis on intellectual and moral training and the determination to draw able young people from every quarter of society are ideas as appropriate today as they were in the Revolutionary age in which they were conceived.

Andover, for all of its two hundred years, has been and remains a place for young people to learn *"the great end and real business of living,"* a goal set forth in the *Constitution* that has served us, unchanged save for emphasis appropriate to the changing times, for two centuries. We serve today over fifteen hundred young people, most between fifteen and eighteen years of age, at the Academy among the course of a calendar year. Some thousand



President George Washington wrote in 1795:

"There are too (sic) private Academies in the state of Massachusetts which are highly spoken of That at Andover I have been at myself; it is in a high, dry & pleasant Country; & is more of a township than a town—Inhabited by respectable & well disposed people. —Schooling, board, washing & lodging will not much, if any, I am told, exceed two dollars a week for each boy." Excerpt from President Washington's letter to his nephew, Colonel William Augustine Washington, who subsequently enrolled his sons.

students are at Andover during the traditional school term for periods up to four years. Over five hundred spend the summer with us. While the students in our day are drawn from a narrower age group than earlier — Eliphalet Pearson faced both a six-year-old and a thirty-year-old in his first class in April of 1778 — their hopes and worries, many of the decisions they face, even their pranks, are timeless.

It should be a privilege to attend Andover, but Andover should not be a school of privilege. We are committed to enrolling able students from all economic levels, from every racial, religious and ethnic entity, "from every quarter" of American life, and from foreign lands. Our *Constitution* bids us do this. Andover is no single group's sanctuary. In a day when many Americans, by their actions, are rejecting even the ideology of the melting pot, we assert it.

Andover is a residential school, a twenty-four-hour learning community. This allows us to draw young people from across neighborhood lines, across state and national boundaries. Young people learn from peers as much as from teachers, particularly in a setting where there is no abrupt clash between classroom and street, between school and home. Class, racial, religious and geographic diversity enrich a school and undermine the divisions that rend national and international life. We presume to forward the learning of leaders here, and leaders in our day must know first-hand how trivial are racial, social, national and religious differences, and how significant is the unity in humanity.

Andover is well-equipped to provide for students whose interests and abilities are primarily in the academic realm, in the traditional liberal curriculum. While the so-called "liberal arts" in American schools and colleges have often drifted into pedantry and dullness, we yet believe that the core of this tradition is sound. When demandingly taught, this liberal arts core provides the basis for public and moral leadership. Keen rationality, nourished by examined tradition, is the root of individual decency and freedom.

In a school the principal means to achieve these ends are decent, free and talented teachers. Andover's teachers are strong personalities, individuals of energy and well-considered values, instructors whose work is in the classroom, and also on the playing field, in the dormitory, in the dining hall — in short, across the full range of places where both adult and young person meet. American education is moving away from such a model of teacher. In the mistaken belief that "efficiency" will result, teaching is broken into mechanistic bits. Andover makes a stand

for the other, older tradition, for whole teachers who are concerned about whole pupils, their struggles and joys, their bodies and souls as well as their brains.

Our American culture, alas, is not one which takes youth seriously. True, we "use" adolescents as a market and sell much to them. We make fetishes of their tastes. We curse them and try to curb them when they disturb adult lives. But generally Americans feel that the teenaged years are something to get over, certainly not something in which to invest, to respect or to trust. The founders of this school knew better, and we reassert that knowledge. We do take youth, and adolescent education, seriously. Youth is important, a crucial time of life. For those whom Andover serves, now and in the future, we want it to be a rich, constructive and joyful experience.

THEODORE R. SIZER
Headmaster





Andover Life

A Beginning



In 1782 Paul Revere was commissioned to make the Phillips Academy seal. Revere engraved the educational faith of Andover's founders—"The end depends upon the beginning"—around the symbols of the rising sun and the hive of industrious bees. The founders' religious and patriotic commitment to the common good is symbolized by the second motto, "Non sibi," "not for one's self."

Phillips Academy opened for instruction shortly before the Continental Army marched out of Valley Forge and, in one sense, the school and the nation have grown up together. Paul Revere engraved Andover's seal; John Hancock signed its Act of Incorporation, and George Washington sent his nephews here to study. Samuel F. B. Morse and Oliver Wendell Holmes were students of Principal John Adams. Harriet Beecher Stowe lived and worked at Andover; she is buried in the Academy cemetery, and her home is now a dormitory. "America" was written on Andover Hill in 1832. For two centuries we have sought to develop sound scholarship, character and self-reliance in our students, as well as a commitment to work for the good of the nation and mankind.

If you come to Andover today, you won't have to go far to see a building designed by Charles Bulfinch or one named for Nathan Hale. You will take classes in a modern arts and communications center, an archaeology museum and in buildings dating back to the War of 1812. You might live in a dormitory constructed in 1808 or one built in 1973. Your next door neighbor might be from Texas or Thailand. You might take Greek and kinetics, or Russian and astronomy. You might learn how to play squash, discover what it's like to work for a radio station or how to run rapids in a kayak or canoe.

The opportunities are here.

The Place

Phillips Academy was the first boarding school to be incorporated in the United States (1780). For 194 years, until 1972, it was an all-male institution; in October of that year the Trustees of the school announced the merger of Abbot Academy and Phillips Academy to effect a single coeducational school. Abbot Academy, established in 1829, was one of the oldest girls' boarding schools in the nation. Several years of coordinated academic courses and





extracurricular activities between the two neighboring schools had preceded the merger. During its two centuries the school has grown in size from a single rude building and a few acres of land to an extended campus of 160 buildings on over 450 acres.

The school is located on a hilltop in the town of Andover, a 45-minute bus ride from Boston and Cambridge. It is well situated for easy access not only to the historical, cultural and entertainment offerings of the Greater Boston area, but to the beaches and mountains for which northern New England is justly renowned.

The People

Students

There are 1114 students (727 boys and 387 girls) in Andover's regular session. A further 600 attend the Academy Summer Session, and some 88 attend Short Term Institutes held on campus at various times during the school year (see page 41).

Andover students come from every walk of life, from every state in the union and from more than 30 foreign countries. They are divided into four classes: Seniors, Uppers, Lowers and Juniors — our traditional terms for 12th, 11th, 10th and 9th graders. Although some are here for four years and others for programs taking a much shorter time, they all have two things in common: intelligence and the willingness to use it.



Faculty

The faculty number 187, 18 with Ph.D.'s and 100 with M.A.'s. The power of an Andover education flows directly from their scholarship and classroom teaching.

Andover asks much of the men and women who teach here: although the heart of the work is in the classroom, the tradition of schoolmastering calls for the teacher to serve simultaneously as house counselor or student advisor, coach and part-time administrator. Andover teachers are accessible to students in the dormitory, in athletic endeavors, in extracurricular activities; they share an abiding interest in the growth of young people and a willingness to become directly involved in that process.

A year, a week, a day

Andover operates on a trimester system, offering 285 separate courses that vary in length from one trimester to the full year. The year begins in late September and ends in mid-June, with breaks at Thanksgiving, Christmas and in the early spring.

Classes are held on Monday, Tuesday, Wednesday morning, Thursday, Friday and every other Saturday morning. Classes are normally 50 minutes long, providing five instructional periods in the morning and, with the exception of Wednesday and Saturday, two in the afternoon. An individual is likely to have one morning period and one afternoon period free each day, depending on the scheduling of courses and laboratories.

Participation in athletics is required of all students, and athletics and activities are scheduled four afternoons a week for two hours each. On Wednesday and Saturday afternoons, varsity and junior varsity teams often participate in interscholastic competition.

Meals are served in Commons, the central dining hall, composed of four dining halls and two serving areas. The cost of meals is included in the tuition of both boarding and day students.

Wednesdays and Saturdays are half holidays with no afternoon appointments. On alternate Saturdays there are no morning



classes. Sunday is totally free. On these days there is time for independent study, for special projects, for informal sports, shopping in Andover or trips to Boston, the beach or the mountains. Social events during the week are limited by the demands of the academic program, but the weekends on campus abound with dances, concerts, movies, plays and informal activities.

Most students are eligible to take a day excuse each week, and after the first two weeks of the year, students are eligible to take overnight excuses beginning after their last scheduled weekly appointment.

Course work is intensive and involves about twenty-five hours of outside preparation each week. In addition, all students are required to attend athletics or afternoon activities for approximately six hours each week. Uppers and Lowers also spend three hours in the school work program per week. Despite the amount of time that must be spent on academic pursuits, most students become very involved in extracurricular activities and social events. The school encourages independence and personal responsibility: there are no study halls, and decisions about the use of one's time are largely left to the judgment of the individual.





Residential Life



Dancing was forbidden in the 1820's, "and when a rash Frenchman proposed to start a dancing academy in the town, the Principal (John Adams) did his best to have him summarily ejected by the village fathers." Claude M. Fuess, *An Old New England School*

Dorms and Clusters

Boarding students live in dormitories with faculty house counselors and their families. Although these buildings vary in size from four to twenty-two students, all are small enough to encourage close relationships among students and between students and house counselor. One third of the students live in single rooms; two-thirds have roommates. Rooming arrangements vary from large one-room doubles to three-room suites; larger dorms are likely to have students from at least three classes.

For many students, dormitory life is one of the most valuable aspects of their time at Andover. Whether it's planning a pancake breakfast or studying for a history mid-term, sharing it with people from very different backgrounds or from foreign lands is a rewarding learning experience.

Dormitories are grouped into six geographical units called "clusters," each including girls' and boys' dorms, about 175 students from all classes, and 15 to 20 faculty families. Clusters create the personal atmosphere of a small community in which everyone knows everyone else and people do most or many things together. The Cluster System is the heart of Andover's residential life, bringing the advantages of a small school to an institution that already has the advantages of size.

The clusters have considerable independence; teachers and students together manage their own affairs under the leadership of a Cluster Dean. Each cluster has its own student officers, discipline system, intramural athletics and informal social activities.

Clusters are responsible for administering much of the student work program, which is designed to develop a sense of community responsibility for the daily operation of the school. It also assists the school in reducing its expenses. Lowers, working no more than three periods a week, share the jobs of returning books to library stacks; operating audio-visual equipment; serving as office helpers, messengers, laboratory assistants; and performing other essential tasks. Upper boarding students are responsible for the daily care of dormitories, while all students in any given dormitory are responsible for keeping its entries free of litter and snow. Upper day students serve two periods a week in work crews raking leaves, sweeping stairways in classroom buildings and doing similar tasks.

The clusters take turns each week working in the dining hall, Seniors serving as overseers. Seniors have other supervisory roles; they proctor in dormitories and, as members of Blue Key, organize the welcoming and orientation of new students in the fall.


Cricket House. Hidden Field.



Counseling and Discipline

Those who are not accustomed to a residential school may at first be surprised by the degree of independence an Andover student has; on the other hand, they may be surprised by the existence of rules and procedures necessary to protect the rights of individuals and to enable the school to achieve its ends. Existing rules have a dual purpose: to preserve the necessary order in the community so that effective learning can take place, and to teach students that individual freedom can be achieved only through due consideration for others. The school tries to keep rules to a minimum. Incoming students and their parents are provided with a copy of the Academy *Blue Book*, summarizing rules and regulations; all students are held responsible for its contents.

Each student has a faculty house counselor who lives with his or her family in the dormitory and who is available for advice and assistance. This faculty member works closely with students in the dormitory on both the personal and academic level, and parents can expect to hear from the house counselor at regular



"On Monday the scholars recite what they can remember of the sermons heard on the Lord's Day previous; on Saturday the bills are presented and the punishments administered."
Principal Eliphalet Pearson's description of the Phillips Academy schedule in 1780.

intervals. Parents are encouraged to turn to the house counselor for information regarding a student's progress.

Each Cluster Dean supplements the work of the house counselor and is available to students and parents for information and advice. Other support staff include academic advisors, who help students in the cluster plan their academic programs, and Co-Directors of College Counseling, who assist all Seniors with their future educational plans. The Psychology Department, located in Graham House, offers individual counseling for any student and leadership training for students who wish to develop those skills.

Discipline is handled at the cluster level and involves the Cluster Dean, house counselor, other faculty and student representatives. Offenses involving a student's integrity, social offenses that threaten the well-being of other individuals or the school community, and continued infractions that indicate an unwillingness to come to terms with the demands of the school all render a student liable to dismissal. Examples are dishonesty, the possession or use of alcoholic beverages or illegal drugs and unauthorized absence from school bounds. Students may not possess, rent or drive any motor vehicle within school bounds; bicycles are permitted. Andover does not allow smoking, unless students have completed a school-administered course on the health hazards involved and have parental permission.

In a community such as Andover, all must commit themselves to the goals of the community and to loyalty to each other. Since education at Phillips Academy is both intellectual and humane, students and faculty derive mutual support from sharing of themselves and their ideals.

Trust and responsibility have many interpretations; these words have become hackneyed from overuse and misunderstanding. But the ideas they embody — sensitivity to others, willingness to explore and respect differing points of view, charity and humility in expressing judgment, readiness to cherish friendship, to depend and to be depended upon — are nonetheless fundamental. Such values can scarcely be legislated and can only be imperfectly defined. Yet the health and happiness of everyone in the community depend on consideration and awareness, restraint and candor, discretion and shared joy. Collaboration toward these imprecise but worthwhile ends is an expectation which all at the Academy hold.

Only boys and girls who feel that they can live happily with the rules and guidelines of Phillips Academy should apply for admission.



Harriet Beecher Stowe, author of *Uncle Tom's Cabin*, and her husband, a Seminary professor, lived in Stowe House. She is buried in the school cemetery. Mrs. Stowe shocked the strict Congregationalist community by giving parties and entertainments for students, was suspected of going to the theater and even of having "Episcopalian leanings." Claude M. Fuess, *An Old New England School*

The Campus Ministry

Phillips Academy is newly committed to a "team" ministry, representing the Protestant, Roman Catholic and Jewish faiths, that serves the principal spiritual needs of the school. The school chaplains are ordained faculty members who generally teach courses other than courses in religion, but have the additional responsibilities of worship services and of pastoral counseling of their flocks. Andover students come from various religious traditions, some have no religious affiliation. The school wishes actively to support several religious communities within the institution and hopes that a less formal but more focused approach to the spiritual life of the school will encourage other teachers and students to active participation and leadership.

Worship services are available for all who wish to participate. Both a Protestant interdenominational service and a Roman Catholic Mass are celebrated on Sunday; the Jewish congregation has services regularly on Friday evenings.

Activities

Extracurricular activities are an important aspect of a student's education, and Andover offers a rich fare, thanks to the diversity of interests in the student body. From the Pre-Med Club member to the Model Railroader, it seems that all Andover students do something special in their free time.

Many of the activities are service-oriented; the Community Service Program places student volunteers in area hospitals, elementary schools, youth centers and other agencies. Closer to home, the Student-Alumni Association handles the responsibility of conducting campus tours for the Admissions Office. Older students who are members of the Tutorial Program offer help to fellow students in academic difficulty. The student radio station, WPAA (91.7 on your FM dial), is on the air from 6:30 a.m. to 11:30 p.m. daily, serving the local listening area as well as the student body. The *Phillipian*, the Academy's student-run weekly newspaper, is wholly uncensored; students lay out the paper and do the typesetting, as well as write the articles and headlines. The *Pot Pourri*, the school yearbook, and the school literary magazine, *The Mirror* (Robert Frost was an early contributor), provide more opportunities for those with a literary bent.

Cultural organizations include the Afro-Latino-American Society, the Foreign Students Union and others; course-related groups range from the Astronomy Club to the Russian Club. The Chapel Council, the Newman Club and the Jewish Student Union support the "team" ministry in providing active religious communities for Andover students.





At any time during the week, actors and directors will be working on a main stage play or on a student production in the Drama Lab; the Andover Student Political Union may be listening to a State Department official discuss the Middle East; the Natural History Club may be birdwatching on an ocean beach; or — if the season is right — the Ski Club may be on its way to the White Mountains of New Hampshire.

Many students make extensive use of school facilities in their free time, whether or not they are affiliated with a club or organization. The Arts Center is a major focus of school life — darkrooms are used almost around the clock, and students and faculty interested in bottle cutting, metal sculpture, ceramics or designing rabbit hutches make use of the center's studios and workshops in their free time. The Music Department also provides facilities for students interested in pursuing music beyond the classroom.

There is no limit to the variety of extracurricular activities at Andover. Students who do not find an existing club or organization that meets their needs are encouraged to start one.

Undergraduate Organizations (Clubs)

Afro-Latino-American Society
Amateur Radio Club
Andover Foreign Students Union
Andover Student Political Union
Anglers' Club
Astronomy Club
Band
Blue Key
Brass Choir
Bureau of Tutoring
Caucus (Af-Lat-Am publication)
Chamber Music Society
Chapel Council
Cheerleaders
Chess Club
Chorus
Coin Club
Day Student Union
Drama Workshop
Duplicate Bridge Club
Eagle Scout Club Post 107
Eidelons (student photography publication)
Fidelio (madrigal singing society)
Forum for Congressional Review
French Club
German Club
Jewish Student Union
Magicians' Club
Mechanics Club
Meteorology Society
The Mirror (literary magazine)
Model Airplane Club
Model Railroad Club
Natural History Club
Newman Club
Orchestra
Outing Club
The Phillipian (weekly student newspaper)
Philomathean Society (debating society)
The Pot Pourri (yearbook)
Pre-Law Society
Pre-Medical Society
Press Club
Radio Broadcast Association (WPAA-FM)
Russian Club
Sailing Club
Ski Club
Social Functions Committee
Spanish Club
Stage Crew
Stamp Club
Student Alumni/ae Association
Student Bicentennial Committee
Student Pilots Association
SUMOP (Summer Job Opportunities)
SWAG (Solid Waste Action Group)
Table Tennis Association



Educational Resources

The Holmes Library

At the center of Andover's intellectual life is the 100,000-volume Oliver Wendell Holmes Library, named after the famous doctor and poet who was a member of the Class of 1825. The stacks are open to students. In addition to academic work, students and teachers use the library to explore new fields of interest and to read casually.

The library subscribes to over 250 American and foreign periodicals and 11 daily papers from cities throughout the country. A microfilm file of *The New York Times* is available. Particular library treasures are an original elephant folio of *Audubon's Birds of America*, papers and books of Oliver Wendell Holmes, and one of the world's leading collections of Vergiliana. The science and mathematics departments have working libraries in their own buildings.

The Addison Gallery



"Wandering"
by Peter Abate

The Addison Gallery of American Art operates both as a museum in the traditional sense and as an art center for the whole community. In addition to organizing exhibits of American art from its own collection, the museum originates exhibits of contemporary painting, sculpture, photography and crafts. A student-produced seminar series brings artists into close range contact with students concerned with issues of use and survival in the arena of contemporary art. In cooperation with Phillips Academy's Music Department, concerts by faculty and students are produced in the museum.

The holdings of the museum are recognized as a distinguished specialized collection: Allston, Copley, Morse, Stuart, West and others represent the Colonial period. Of special importance among the many paintings of the nineteenth century are examples by Cole, Doughty, Eakins, Homer, Inness, LeFarge, Ryder, Twachtman and Whistler. The early part of the present century is shown in the work of Bellows, Davies, Demuth, Hassam, Hopper, Luks, Marin, Prendergast and Sloan. Contemporary artists are represented by works of Calder, Lippold, Moholy-Nagy, Hofmann, O'Keeffe, Pollack, Shahn, Wyeth and others.

The Robert S. Peabody Archaeology Museum

The Robert S. Peabody Foundation for Archaeology has conducted major archaeological research in this hemisphere for the last 75 years and has published many reports of its scientific investigations. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas. The laboratories of the museum assist in teaching and illustrating the Foundation's research. Mature students may undertake special study projects which involve the use of the Foundation's collections and library resources.

Current research is concerned with the origins of agriculture and with the concomitant rise of civilization in the New World. The Foundation maintains continuing research programs in Mexico and Peru and supports major publications based on the analysis of this research. The Peabody Foundation is under the direction of Dr. Richard S. MacNeish, a member of the National Academy of Sciences of the United States.

The Cochran Sanctuary

The Moncrieff Cochran Sanctuary is a sixty-five-acre tract of rare beauty located so close to the center of school activity that it is in fact an extension of the campus. Landscaped areas planted with dogwood, azalea, rhododendron and laurel provide a succession of bloom that draws many visitors from late April to mid-June. A brook and two ponds attract nesting ducks and geese, and extensive natural wild areas, varied in terrain and plant life, draw many species of small land birds and provide nesting places for grouse and pheasant. Cross-country runners and skiers make extensive use of the Sanctuary, as does the Academy's Search and Rescue program.





The Academic Departments

The Curriculum

The curriculum of Phillips Academy contains a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical. All departments offer courses beyond the level of preparation for college.

Classroom groups are small enough to permit individual attention; the average class size is fourteen. Students are placed in sections fitted to their attainment and, through accelerated sequences and advanced courses, are encouraged to progress at a rate commensurate with their ability and ambition. Many students fulfill requirements ahead of the normal year, increasing their choice of college-level courses and other elective opportunities. Andover's trimester system provides flexibility and variety in the curriculum and allows various combinations of independent work and off-campus projects.

Every student is assigned to an academic advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements and the student's particular interests. With the approval of the academic advisors and house counselors, students may select their instructors, class times and sections during the Arena Day preceding each trimester. However, the school cannot guarantee that all students will be able to have their desired selections.

The curriculum is described in detail in the *Course of Study*, which will be sent to each preliminary applicant and to others who request it.

THE ARTS



When Humphrey Bogart flunked out of Andover in 1918, it was not from lack of ability, his teachers agreed. Headmaster Alfred Stearns wrote to Humphrey's father, a classmate of Stearns: "The boy is all right at heart and is bound to come out on top."

Visual Arts

At the heart of the art program is a concern that all students learn to see freshly and accurately, that they learn how to organize their efforts to make something happen, that they develop a critical eye for the coherence of their environment, all these with an independent mind.

The diploma requirement in art is as follows: entering Juniors and Lowers must take a trimester course in studio art; an entering Upper must take a trimester course in studio art or music. Andover attempts to balance structured, problem-solving courses like the basic Visual Studies, with more adventurous advanced courses, organized around longer-term projects. For a student who desires several terms in art or design, the courses are here, whether the student's objective is a professional school, Advanced Placement in a liberal arts college, or simply a strong basis in a traditional area of general education.

The superb facilities of the Arts and Communications Center — fully equipped wood and metal shops, two complete photo labs, print-making equipment, painting and drawing studios, a kinetics studio — are supplemented by the several kilns available to ceramicists. At any given moment over one-third of Andover's student body is involved in photography courses. The department welcomes extracurricular use as well as work related to courses, and faculty members are on hand every evening to encourage the idea that whether it's painting or bicycle repair, the Arts Center is the place to go.

Theatre

Courses in theatre are designed for students who seek formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experiences is available: some courses are performance oriented; some are theory oriented; some are both. All combine classroom and workshop sessions; students work out practical theatrical problems together under the guidance of an instructor. Courses in directing, acting, production, stage lighting and design are all popular.

George Washington Hall includes a flexible, professionally equipped proscenium stage, capable of handling audiences of one thousand. It has a full fly system, accommodation for numerous lighting instru-





ments and an elevator/pit. In the past year, main stage productions included *Scapino, Who Killed Santa Claus, The Me Nobody Knows, A Thurber Carnival, Cabaret,* and *The Time of Your Life.*

The Drama Lab, also in George Washington Hall, is a "black box" — an intricate arena/workshop with excellent lighting facilities, suitable for audiences of not more than 100. Although main stage plays are usually directed by a member of the faculty, the Drama Lab allows students to direct plays themselves and to experiment with dramatic styles. A sample of productions from the last year includes *Trial by Jury, The Point,* and *The Prime of Miss Jean Brodie,* and plays by Albee, Ionesco, and Pinter.

Theatre students are encouraged — but not required — to supplement their classwork by participating in any of the numerous productions mounted each year; anyone may audition for the Andover Touring Company, for five years part of an exchange program with schools in England, touring with *Our Town, Harvey, The Fantasticks* and *Scenes from an American Life* during spring vacation.

Music

The Music Department faculty consists of five full-time and several part-time instructors. Other highly qualified instrumentalists are available to teach voice, piano, organ, classical guitar, brass, percussion, strings, and woodwinds.

Andover offers courses for the beginner as well as for intermediate and advanced students both at the applied level (study of musical instruments or playing in a musical organization) and in the history, appreciation, and theory of music. An entering student who has not had the opportunity to learn to play may join a class to study an orchestral instrument. He or she may also, for a nominal fee, study privately.

The Nature of Music, or Music 20, is the diploma requirement in music, and a prerequisite for most courses in the history, appreciation, and theory sections. A more advanced three-part course, Theory of Music, runs in sequence throughout the year.

Graves Hall, the department's home, has large rehearsal halls for the Concert Band and the String

Orchestra, many individual practice and ensemble rooms, one music classroom, teaching studios and an electronic music studio. The department also has a large, up-to-date record library and listening room. The Chorus has a fully equipped rehearsal room and a library of music literature in the Cochran Chapel, a short distance away. The Chapel also houses three organs for the use of beginning and advanced organ students.



ART

Introductory Studio Courses

Visual Studies
Introductory Ceramics
Introductory Photography
Art Studio

Intermediate Studio Courses

Drawing
Animation
Two-Dimensional Design
Three-Dimensional Design
Intermediate Ceramics
Intermediate Photography

Advanced Studio Courses

Visual Studies (Art 10) is a pre-requisite for all advanced courses.
Graphics and Photography
Studio Photography
Painting
Filmmaking
Advanced Ceramics
Print Shop
Advanced Photography
Sculpture
Kinetics
Architecture
Contemporary Communications
Puppetry
Phillips Academy Bicentennial Exhibition
Calligraphy: The Art of Lettering by Hand
Art and Architecture in Antiquity and the Middle Ages (History)
Art and Architecture in the Renaissance and Baroque (History)
Art and Architecture Since the French Revolution (History)
American Art History, 1770-1950 (Art History)

MUSIC

Applied

Beginning Instruments
Recorder Ensemble
Brass Ensemble
Woodwind Ensemble
String Ensemble
Fidelio Society
Band
Chorus
Chamber Orchestra
Private Instrumental and Vocal Lessons
The Nature of Music

History and Appreciation

Medieval and Renaissance Music (to 1600)
Baroque Music (1600-1750)
Classical Music (1750-1820)
Romantic Music (1820-1900)
Twentieth Century Music (1900-Present)
Independent Study in the History and Literature of Music
Jazz

Theory

Orchestration and Conducting
Theory of Music I
Theory of Music II
Theory of Music III
Electronic Music
Advanced Techniques in Electronic Music

PERFORMING ARTS

Theatre Courses

Introduction to Theatre
Introduction to Acting
Public Speaking
Acting Workshop
Scene Study
Directing Workshop
Stagecraft
Play Production
Shakespearean Workshop
Playwriting

Dance

Introducton to Dance

CLASSICS

The study of Greek and Latin challenges students to examine evidence and to develop powers of independent thought and the awareness that the social, political and economic problems that confront us today have appeared many times in human history. Through the study of classical languages, students establish a firm basis for humanistic studies in their own language and literature. By reading ancient authors they may learn what constitutes a "classic" and what the classics mean today. Mature students are encouraged to undertake independent projects of their own choosing on a tutorial basis.

Each year students produce a Roman comedy. These have usually been plays by Plautus, and in recent years have included *Captivi* (The Prisoners), *Mostellaria* (The Haunted House), *Menaechmi* (The Two Brothers), *Curculio* (The Parasite), *Pseudolus* (The Crafty Slave), and *Rudens* (The Rope). Andover students have also produced two tragedies in Greek, Aeschylus' *Oresteia* and Sophocles' *Ajax*.

Ever since its founding, Andover has had a long line of distinguished teachers of classical languages. In recent years members of the Classics Department have published textbooks, both in Latin and Greek, for use in secondary schools. Classes are held in Pearson Hall, designed by Charles Bulfinch, the oldest classroom building on campus.

THE CLASSICS

Greek Courses
Greek-10
Greek-10-20
Introduction to Greek
Greek-20
Greek-30
Greek-40

Latin Courses
Latin-10
Latin-10-20
Latin-11
Introduction to Latin
Latin-20
Latin-21
Latin-30
Latin-31
Latin-40
Latin-50

Classics Courses
Classical Civilization: Greece
Classical Civilization: Rome
Epic Poetry
Etymology

ENGLISH

Convinced that level of achievement is more important than the number of years a subject is studied, the English Department has established modest but firm diploma requirements. A student must prove himself competent in writing and reading through the English Competence course and, by taking the Literature Sequence, acquire a sense of the depth and breadth of his literary heritage.

Once the student has successfully completed that Literature Sequence, which normally takes a year and offers several options, opportunities multiply. Students may enroll in any of the Literature Sequence courses that they have not yet taken; they may study any of the more than twenty-five advanced or specialized courses offered by the department; if a Senior, they may qualify for an independent project supervised by the teacher of their choice.

The department also serves the needs of less





advanced students. Tutorials are offered for training the fundamentals of language. For foreign students, a specialist teaches English as a Second Language. The normal course for Juniors (ninth-graders) is English 10, designed to teach the students mastery of the sentence and the paragraph, a sensitivity to literature, and an awareness of the challenge of articulate communication.

The walls that used to separate academic departments are crumbling. Many courses in the Performing Arts, most notably in Theatre, are taught by members of the English Department. Most of the interdisciplinary courses are related to English studies. A course in English etymology is taught by the Classics Department. Several of the foreign language departments offer courses about their literature in English translation, but the fundamental requirement does not change. Every student who graduates from Andover has either passed the Competence course in the basic skills of writing and reading or has proved himself competent on the departmental examinations.

ENGLISH

Introductory Courses
English for ninth graders
Perception and Expression
English as a Second Language
Basic Skills
Language Skills

Required Sequence Courses
English Competence (two terms)
Lit A, 20th Century (one term)
Lit B, 1660-1900 (two terms)
Lit C, Shakespeare (one term)

Elective Courses
Only courses with sufficient enrollment will be given.
Efficient Reading
Irish Studies
Philosophy and Literature
Great Writers Before 1850
Introduction to Writing
Hemingway: The Man and His Work
Toward the Promised Land
James Joyce
Man and God
Modern Playwrights
Shakespeare: The Man, The Times, The Theatre, The Plays
Writers in Depth
Satire and Comedy
Novel and Drama Seminar
Creative Writing
American Writers of the Twentieth Century
Milton and Spenser
Chaucer and his Age
The Metaphysical Poets, and After

HISTORY AND SOCIAL SCIENCE

The thirty-one courses in History and the Social Sciences cover a broad spectrum of human experience: from the Vietnam War to ancient Athens, from modern art to primitive cultures, from the American family to Chinese society. They range in teaching techniques from drill in close reading, note-taking and testing to individual projects, written or oral, conceived by students. All are based on the conviction that a citizenry that is informed about man's experience, both past and present, is essential to a democracy such as ours, and on the hope that once interest in the story of man has been kindled, it will be pursued for the rest of an individual's life.

The courses for the two lower classes are generally short, term-long introductions to different aspects of man's experience: how human societies originated (anthropology), how man governs himself at the lower levels of the political system (state and local government), how great men contribute to the ages in which they live (American, European, and Asian biography). No course in the department uses a formal textbook. Students work with paperbacks, books on reserve in the library, mimeographed handouts, movies, and slides. The three courses in biography are particularly designed to prepare the student for the course in United States History to be taken in the Upper or Senior year.

The diploma requirement for history is successful completion of United States History plus one trimester elective taken in the Upper or Senior year. Again the approach is topical; the traditional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review. In United States History, and in many of the trimester electives, students are required to choose their own topics for an extensive paper; they are encouraged to use the raw materials of history — newspapers, letters, diaries, interviews. Qualified students in American History may spend the spring term in Washington, working as interns in Congressional offices.

HISTORY AND THE SOCIAL SCIENCES

Social Sciences

An Introduction to Government and Politics: A Study of State and Local Government
China Today
The Emergence of Man
Man and Society: Urban Studies
Environments and the Individual
Introduction to Economics

History

Modern China
Modern Japan
Leaders of the Western World: The American Scene
Leaders and Issues of the Western World: The European Scene
Asian Biography
The United States
East Asia in Revolution
The Discovery of India
Modern Europe: A Survey
Modern Russia
International Relations: The Present Patterns
Topics in the History of Phillips Academy and Abbot Academy
Victorian England: England in an Age of Expansion
The Rise and Fall of the American Presidency
The City in America
Schools in America
Families in America
Quantitative Historical Data Analysis
Women in History
Art and Architecture in Antiquity and the Middle Ages
Art and Architecture in the Renaissance and Baroque
Art and Architecture Since the French Revolution
American Art History, 1770-1950
Ancient History
Elizabethan England
The Middle East
Modern Russia: History and Literature
Major "Isms" and the Nation State



Graceful Bulfinch Hall (1819) has been in Academy use for more than 150 years as a recitation hall, gymnasium, dining hall and now houses Andover's English classes. Dr. Oliver Wendell Holmes, Class of 1825, immortalized "the classic hall" in his poem, "The Schoolboy," written 100 years ago for the Academy's Centennial Celebration.

MATHEMATICS

The opportunity to study mathematics at Andover is limited only by the interest and capacity of the student. The teaching staff has had a wide variety of training and experience. Some have been engineers, aviators, naval deck officers, navigators, musicians, athletes, or chefs, and all have been well trained in mathematics, most of them having at least a master's degree in their field. They are men and women who have contributed to the teaching profession by writing textbooks, by writing articles for journals, by serving on committees of such national organizations as the National Council of Teachers of Mathematics, the School Mathematics Study Group, and the College Entrance Examination Board Committee. More importantly, they are devoted to teaching a subject which they find fascinating and which they wish to make fascinating for others.

To serve all needs, the mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, and three of precalculus topics, completion of which will satisfy the diploma requirements and provide a firm foundation for more advanced study. A student entering with little or no prior study of algebra normally starts with Elementary Algebra, those with a partial year of algebra enter Algebra and continue to Geometry. Students entering with a full year of algebra enter Geometry. Those with one year of algebra and one year of geometry will satisfy diploma requirements by taking Intermediate Algebra and Elementary Functions for one year.

Besides the standard sequential courses, the department offers many elective, term-contained and year-long courses, descriptions of which may be found in the *Course of Study*. Faculty in the department are always willing to guide students in individual projects. Projects have in the past been in such fields as probability, computer programming, computer assembly languages, the theory of numbers, advanced geometry, linear albebra and Markov Chains.

The required sequential courses involve algebra, geometry, logic, statistics, computer programming, elementary functions and elementary probability. The elementary and advanced elective courses include the study of limits and sequences, mathematical models, elementary and advanced calculus, analytic geometry, differential equations, probability, statistics, computer analysis, linear algebra and vector analysis.

The Mathematics Department is located in Morse Hall, which was completely remodeled in 1964. It houses the campus computer center which offers time sharing in the BASIC-PLUS language through ten public terminals. Instruction and practice in the use of the computer are given in the required course sequence. The computer is a PDP-11/45 manufactured by the Digital Equipment Corporation.

Over one-third of all mathematics at Andover is taken electively, much of it in preparation for the Advanced Placement Examination. In 1976, over 100 students took the exam. The community of students who like math at Andover is sizeable, and they share their curiosity and knowledge by offering to tutor other students at the school.

MATHEMATICS

Courses Leading to Satisfaction of the Diploma Requirement

Elementary Algebra
Algebra
Geometry
Intermediate Algebra and Elementary Functions
Geometry and Circular Functions
Precalculus
Transcendental Functions
Elementary Functions

Elective Courses

Only courses with sufficient enrollment will be given.
Intuitive Calculus
Exploring Data
Probability and Statistics
Statistics
Mathematics Revisited
Theory of Numbers
Computer Programming
Problems, Brain Twisters and Puzzles
Elementary Calculus
Infinite Series and Differential Equations
Honors Calculus
Calculus Continued and Other Topics
Linear Algebra and Vector Calculus

Special Courses

Mechanical Drawing (Elementary)
Mechanical Drawing (Intermediate)
Mechanical Drawing (Advanced)
Navigation (Coastal Piloting)
Navigation (Celestial)

MODERN FOREIGN LANGUAGES

Knowledge of language is the key to communicating with and understanding other people. Foreign languages open the door to other countries and cultures and encourage cooperation between nations. The modern foreign languages offered at Andover are French, German, Russian, Spanish and introductory Italian.

In the first years Andover emphasizes understanding and speaking, and the foreign language is used in the classroom from the first day. Small classes of approximately fifteen students allow each individual the chance to speak often. An extensive language laboratory makes frequent aural-oral practice possible.

Some courses are specifically designed to allow rapid advancement from one level to the next; a student enrolled in one of these courses may accomplish three years' work in two. Courses at the 4th-, 5th- and 6th- year levels may include the study of the art, history, geography and literature of the foreign country. Students may prepare for the Advanced Placement Examination in 4th- and/or 5th- year courses and then may be able to advance directly into upper level courses at college.

Further opportunity for accelerated learning is offered by School Year Abroad programs in France and Spain (see page 42).

Students, particularly Seniors, may wish to pursue an independent project with the modern language faculty. The project is planned by both student and tutor. Apprentice teaching with a beginning language section has been a popular project for advanced students.

French

Before the outbreak of the French Revolution, French was considered the universal language of the West. It was the language of diplomacy, was already flourishing as a literary medium and because of its clarity and precision, reflected both French culture and philosophy, influencing the development of democratic institutions in the United States, as well as in other countries. The study of French rewards the student with the ability to communicate with French-speaking peoples and enables him to appreciate the importance of order in expression, broadening his views through a growing familiarity with the rich and lively literature and civilization that the language represents.

The Andover student may at the third year of French elect any sequence of trimester courses in literature, civilization or intensified language study. In the fourth, fifth and sixth years this study can continue in greater depth. School Year Abroad offers a year program in Rennes. A six-week Short Term Institute immersion in French provides further curricular options. A weekly *Veillée*, sometimes a French-speaking dormitory, and a radio program on WPAA give students the opportunity to speak under different circumstances outside the classroom.

German

German is central Europe's principal language, and knowledge of it opens up an understanding of European culture and affairs. Students may learn German to read the works of Goethe, Schiller, Lessing, Kafka, Hesse, Brecht and Grass in their original form, or to follow the arguments of Hegel and Nietzsche, or perhaps to understand more intimately the background of modern socialism and democracy in the world. Many of the most important developments in modern physics, electronics, chemistry and engineering were originally published in German, and American businesses have realized the importance of personnel able to speak German.

The German Department offers a six-year course with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. The



more advanced courses give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography.

Russian

Approximately 40% of Russian secondary school students are learning English. Although secondary school is still the best place to begin, only a fraction of 1% of American secondary school students study Russian.

If, as recent treaties and exchange programs suggest, the US and Russia are in a continuing era of cooperation and understanding, will our doctors, legal experts, scientists, educators and businessmen be obliged to carry on all mutual investigations with Soviet counterparts in English? Certainly, from the standpoint of mutual respect, this would be a poor beginning. The obvious solution is an increasing pool of intelligent young American men and women who know the Russian language.

Occasionally supplemented by visiting instructors from the Soviet Union, the Russian Department consists of four instructors, all of whom have travelled and studied in the USSR. The department offers a course of five years of study. An accelerated sequence enables qualified students to complete four years' work in three and receive four years' credit. Russian as a second foreign language is a popular choice. However, many of Andover's 9th and 10th graders successfully choose Russian as a first language.

Spanish

The Spanish Department is anxious to help students discover the rich variety of cultural heritage in the Spanish-speaking world through intensive study of the language, both spoken and written.

It seems particularly important for students to learn a language spoken every day by millions of Americans living in major cities and towns across the United States. Those students who will enter the professions will find Spanish an indispensable tool. But whatever they eventually do, knowing Spanish will be the key to a richer and more rewarding life.

The department meets the needs and tastes of a great variety of students in its multiple offerings in five years, including accelerated courses on campus and overseas.

MODERN FOREIGN LANGUAGES

French
French-10
French-10-20
French-11
French-12
French-20
French-21
French-22

Third-Level Courses
Language Review and Contemporary French Life
Selected Readings
Village Français
French Civilization
Intensive Conversation and Phonetics
Written Expression
Literature and Film
French for Tourists
Initiation to the French Theatre
French
French Literature
French History
LeMonde Francophone: French Civilization Outside of Europe
Québec et les Quebécois
Advanced Conversation and Phonetics
Written Expression and Stylistics
French-50
French Language-51
French Literature-52
Contemporary French Literature-60
Senior Projects

German
German-10
German-10-20
German-20
German-22
German Literature-30
German Literature-40
German-50
German-60
Senior Project

Italian
Italian

Russian
Russian-10
Russian-12
Russian-10-20
Russian-20
Russian-22
Russian-30
Russian-40
Russian-50
Russian-60
Senior Project

Spanish
Spanish-10
Spanish-10-20
Spanish-15
Spanish-20
Spanish-22
Winter Term in Mexico
Spanish Language Review
Aspectos de la cultura y civilización del Mundo Hispanico
Spanish-32
Spanish-40
Spanish-42
Spanish-52
Spanish-60

RELIGION AND PHILOSOPHY

The department seeks to initiate students into three distinctive human quests not directly considered elsewhere in the formal curriculum: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered in three groupings corresponding to the three quests and at a variety of levels. In each grouping an introductory course is supplemented by courses emphasizing specific issues and by courses emphasizing high-level theory. All courses are elective and involve four prepared class periods.



RELIGION AND PHILOSOPHY
I. The Search for Meaning
The Religions of Man: A Literary Perspective
The Development of Ideas in the Old Testament
Jewish Identity and Experience
The New Testament
Views of Human Nature
From Antiquity to Modernity: The Evolution of Christian Thought
Reason, Faith and Transcendence
Existentialism
II. The Search for Justice
Values Clarification: Situations, Discernment and Decisions
Ethical Issues in the Sciences
Contemporary Ethics
Law and Morality
Ethics and Education
In Search of Justice: from Socrates to Marx
III. The Search for the Foundations of Knowledge
Proof and Persuasion
Discovery, Understanding and Creativity
Biblical Narrative: The Personal Dimension
Post-Biblical Jewish Thought
Nonviolence in Theory and Practice

SCIENCE

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers Andover students an introductory term-contained course in archaeology in the fall term. The course deals with the prehistoric development of civilization in the four earliest centers: Mexico, Peru, China and the Near East, as well as with archaeological theory and method. The Foundation maintains a museum which cares for many famous collections based on some of the most important archaeological expeditions undertaken in the Americas.

Biology

Andover provides ample opportunity to develop interest in the biological sciences. In addition to the basic biology course, the department offers advanced courses in ecology, animal behavior and Advanced Placement biology. The basic course gives students a general background and an understanding of some of the current trends in biology. Field trips, laboratory work, independent projects, lectures, slides and films are all part of the course.

Animal Behavior studies wildlife in eastern

Massachusetts. The course plans field trips to the coast, salt marshes, lakes and wooded areas within a few hours of Andover.

An advanced biology course prepares older students for the Advanced Placement exam. The material offered by the basic biology course is reviewed, and new concepts, techniques and examples are also presented. The labs give students experience in the techniques of centrifugation, chromatography, electrophoresis, spectrophotometry and statistical analysis.

Informal field trips are held throughout the year for interested students who may or may not be currently enrolled in a biology course. The small zoo in Evans Hall is maintained by students. Its population varies with student interests and the reproductive rate of the animals. The department is equipped with a phase microscope and several camera attachments for studying photomicrography. In the basement of Evans Hall there is an extensive bird collection on loan from Harvard University, and a natural history museum maintained by interested students.

The Evans Hall greenhouse is a refreshing place to visit during the long winter months. Students grow plants there or start potted plants for their own rooms. An environmental growth chamber is available for those interested in photoperiodism. Facilities are also available for the study of many aspects of bacteriology. Independent study is encouraged, and, indeed, is the basis of several of the term-contained courses.



Chemistry

The Chemistry Department offers full-year introductory courses at various levels which enable students to continue work in chemistry after completing the first course.

Students have undertaken many special projects in the well-stocked laboratory. For example, one student recently investigated the "Miller experiment," the synthesis of amino acids by electric discharge through methane, water vapor and ammonia. Another examined the colors of optically active coordination compounds of cobalt. One student spent a term synthesizing organic compounds and examining their infrared spectra. Two students have studied organic qualitative analysis as an introduction to the chemistry of organic functional groups. Although qualitative analysis has been included in the latter part of many elementary courses in organic chemistry, this may be the first instance of its use at the very beginning.

Students usually suggest their own experiments, but they can also adopt and change existing projects in a creative way. A student might design computer programs for chemistry problems, study the use of microchemistry to diminish school laboratory pollution, or explore molecular structures with infrared spectroscopy.

The department has the equipment for the usual experiments in elementary synthesis and analysis, including five Mettler single-pan analytical balances. There are instruments which enlarge the scope of feasible projects — a pH meter, several vacuum tube voltmeters, a Kontes Universal Electrode Kit, a Kern polarimeter, a Bausch and Lomb Spectronic 20 colorimeter and a Perkin-Elmer 700 infrared spectrophotometer. Convenient access to the computer (PDP-11, resource time-sharing system) in the Mathematics Department is provided by a teletype terminal located in the Chemistry wing of Evans Hall.

Physics

The Physics Department teaches four basic courses of various degrees of difficulty. Most require laboratory work and consist of classroom demonstrations, discussions and problem-solving. Also offered are courses in earth science, astronomy, physical science and the history of science for younger students, as well as electronics, astronomy and college-level Advanced Placement courses for older students.

Project work may be done for credit or merely one's own satisfaction. In recent years students have transmitted conversations by means of laser beams and built a Van de Graff proton accelerator. One student worked on holograph experiments; another built his own electronic calculator. Other students have used sophisticated equipment to measure the velocity of light, determine Planck's Constant and perform experiments of their own design. In recent years astronomy has become a larger and more active subset of the department.

Psychology

The Department of Psychology offers four term-contained courses, three for Uppers and Seniors, one for Lowers and Juniors. The course for underclassmen is concerned with the psychology of human behavior as it relates to life in a residential school. The courses for upperclassmen include an introductory course in psychology, a course in human sexuality and a course in the psychology of human behavior in small groups.

Individual instructors in the department welcome the opportunity to discuss special interests with any student and have sponsored individual projects such as a study of student values, the evaluation of a social service experience and a program of reading and discussion in a specialized branch of the field.

Dr. Charles Abbot, Class of 1891, a solar energy pioneer and head of the Smithsonian Institution for many years, predicted in the early 1940's that solar energy would become the primary source of power when oil and coal were depleted. In 1972, he received his last patent, for a device to convert solar energy into electricity, shortly before his 100th birthday.



ARCHAEOLOGY
Archaeology

SCIENCE
Introductory Physics Science
Preparation for the Physical Science
Earth Science
Astronomy—the Solar System
Oceanography
Ecology
Introduction to Physics
Energy and the Future

Biology
Biology-30
Biology-44
Biology-52

Chemistry
Chemistry-25
Chemistry-30
Research in Chemistry
Chemistry-44
Chemistry-52
Chemistry-55

Physics
Physics-20
College Physics-30
College Physics-30-23
Advanced Physics
Physics Honors
Relativity and Quantum Mechanics

Special Science Courses
Animal Behavior
Observational Astronomy
Astronomy—The Universe Beyond the Solar System
Geology

PSYCHOLOGY
The Psychology Department offers four term-contained courses as electives.
Human Awareness
Human Relations
Human Sexuality
Introductory Psychology

Other courses

INTERDISCIPLINARY
Study Skills
Synthesis: A Multidisciplinary Approach to Problems
Literature of the Quest
Russian Literature in English
Soviet Literature in English

PHYSICAL EDUCATION
All new Juniors and new Lowers are required to elect one trimester of PE. 10 in addition to their regular athletic commitment.
Physical Education



Complementary Programs

THE COMPLEMENTARY SCHOOLS PROJECT

The Complementary Schools Project combines a group of innovative programs and ideas at Phillips Academy. Established in 1972, the Project was designed as a means of better coordinating public and private education nationally. Behind the CSP concept is that of multiple schools. While one school may be accepted as the "home-base" diploma-granting institution, several other institutions may be utilized as complements to this school. Thus far, the multiple schools idea has taken form in several program models under CSP, which are open to Phillips Academy students as well as students from other schools.

The Andover Summer Session

The Andover Summer Session is a short intensive academic program in which both innovative and traditional courses are taught in only six weeks. Courses in all subjects and at all levels demand hard work — harder work than most students have ever before experienced. Besides English, modern and classical languages, mathematics, history, and the sciences, the curriculum offers such opportunities as Acting and Directing Workshop, Social Psychology, Masters of the American Film, Archaeology and Anthropology, Economics, and the American Presidency. In addition, courses at the Advanced Placement level are taught in calculus, chemistry, and biology.

Other features of the Summer Session are a special Writing Program, including the nationally known "Competence in Reading and Writing" (developed at Andover); an expanded ESL Program (English as a Second Language) for foreign students who wish to achieve English fluency; and a Chamber Music Program which provides a unique opportunity for musical students in all combinations of piano, strings, winds, and voice, including individual instruction, small ensemble work, orchestra, and chorus. The Chamber Music Program is an integral part of the Summer Session with class hours, afternoon activities, mealtimes, etc., the same for music participants as for all other students.

The Summer Session makes use of all the school's facilities and is open to able boys and girls from all parts of the country and abroad. Applicants must be graduates of the 9th, 10th, 11th or 12th grades. The faculty and staff are an expert and diverse group of men and women, some of whom come from Phillips Academy and some from other schools and colleges. A catalog can be obtained by writing The Andover Summer Session, Phillips Academy, Andover, MA 01810 or calling 617/475-3400, ext. 170.

The Short Term Institutes

The Short Term Institutes at Andover are intensive, four-, six- or ten-week courses of study in a single subject, designed to offer high school students a unique residential learning experience. First taught in the fall of 1974, the Institutes are scheduled during the winter and spring of each academic year.

The average Institute enrolls a dozen students who are together for four hours of class, lab and fieldwork each day. Most STI students have been Seniors, but the program is open to any highly recommended student in the 10th, 11th or 12th grades.

While the curriculum changes from year to year, the STI program usually offers study in modern languages, physical and biological sciences, mathematics,





and English. However, the actual courses themselves are generally rather innovative. Some of the past Institutes have been Observational Astronomy, Beginning Russian, Psychology, Poetry & Photography, Animal Behavior, and Finite Mathematics. All Institutes are taught by Phillips Academy faculty members.

STI students live together in a complex of dormitories and have at their disposal all the usual social, athletic and academic facilities of the Academy, as well as access to a variety of cultural facilities in Boston.

Time is scheduled during which STI students can partially maintain any obligations to their home school classes. Most students are fully caught up within two or three weeks of their return home. Some STI students have been granted college credit for their Institute work, and the Dean of the STI program is happy to fill out college recommendations for any STI graduate.

For further information write to Mrs. Jean McKee, Director of Admissions, The Short Term Institutes, Phillips Academy, Andover, MA 01810 or call 617/475-3400, ext. 172.

School Year Abroad

School Year Abroad conducts programs for upperclassmen in France and Spain. Originated by Andover as an off-campus program, it was later jointly sponsored by Andover, Exeter and St. Paul's School. Students may spend a full academic year living with host families while pursuing a course of study under the supervision of teachers from the original sponsoring schools. The program provides full academic credit, permitting students to graduate from Phillips Academy with their own class, as well as the experience of immersion in a foreign culture. Qualified Upper Middlers and Seniors, who will have completed the American history and laboratory sciences requirements, are eligible for School Year Abroad. A catalog can be obtained by writing School Year Abroad, Samuel Phillips Hall, Phillips Academy, Andover, MA 01810.

The National Network of Complementary Schools

Phillips Academy is a member of the National Network of Complementary Schools, which provides its students the opportunity of attending, on an exchange basis, the intensive specialized programs offered by member schools.

The Network is a group of diverse schools which have joined together to serve their students in a new and unique way by sharing their specialized programs. Structured on an "intensive" basis so that the student normally focuses on a single topic or is fully involved in one internship, most of the Network programs are offered because they exploit a special strength or resource of a particular school.

The excitement and challenge of these programs are increased by the opportunity to experience a new and different community. Students travel to the other school locations on a "term-length" basis; live with local families or in dormitories, in the case of boarding schools, and experience studying with a new group of students from all over the country.

The Network was conceived and planned in 1974 by administrators from Phillips Academy and Beverly Hills High School, Beverly Hills, California. The Short Term Institutes at Andover are offered as the Academy's Network program.



Other Complementary Programs

Andover offers several complementary residential programs. The Washington Intern Program, sponsored by Andover and Phillips Exeter Academy, allows a group of Upper Middlers to spend the spring term in Washington working in the offices of U.S.Senators and Congressmen.

In addition to school-sponsored programs, many Seniors arrange off-campus projects related to their special interests. Some have worked as interns with officials in local government and members of the Massachusetts legislature, while others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative and careful planning of a course of study that will meet diploma requirements and free a block of time during the term.


64
53
21



Athletics



Archie Bush, Class of 1866, returned from the Civil War to complete his studies and organized a baseball team for Andover's first interscholastic sports competition. When Archie and his friends cut a geometry class to attend a baseball game, Principal Samuel Harvey Taylor, who brooked no nonsense, kicked them out of school. The Trustees rescinded this action years later and granted them all diplomas. Too late for Archie, who had died on his honeymoon trip to Europe.

In sports, as in studies, students are expected to meet basic requirements and are given wide choice in broadening and deepening their skills, interests and dedication in athletics.

A basic evaluation test is given to all new girls and boys to insure that each student has the physical skills necessary for further participation in the athletic program. Special courses are required of those students whose test results indicate a need for attention in the area of physical aptitude. Similarly, non-swimmers are given instruction toward meeting reasonable standards of proficiency. In addition, new Juniors and Lower Middlers have physical training four hours a week for one term of their first year, as well as regular athletics.

The regular afternoon athletic program includes a wide variety of offerings in varsity and junior varsity competitive interscholastic sports, in intramural cluster-organized athletics and in instructional and recreational physical activities. Wherever numbers permit, separate interscholastic competitive team programs are created for Junior boys.

Upperclassmen have the opportunity to substitute a physically vigorous activity or project for one term of athletics a year. Furthermore, the Academy has occasionally been able to accommodate the unusual needs of certain students to pursue already highly developed skills, in addition to the normal athletic requirement. Finally, each spring the department offers a Senior Life Saving course and a Water Safety Instructors course for those swimmers who wish official accreditation.

The school maintains several athletic facilities which include 12 playing fields and 25 tennis courts; the Borden and Memorial Gymnasiums with swimming and diving pools, basketball and squash courts,



weight training room and other conventional gym spaces; the Case Memorial Cage with its indoor track; the Sumner Smith Hockey Rink; the crew boathouse on the Merrimack River; the ski trails and jump at Holt Hill; and the Search and Rescue Room in Evans Hall, which provides the base of operations for Andover's popular outdoor program.

Phillips Academy is committed to a required athletic program that provides a variety of sports and activities to its students. The Academy discourages overspecialization in sports at this age level; the athletic program is a complement to, not a substitute for, the academic curriculum. The Athletic Department oversees the program and its facilities with the support and advice of the Faculty Athletic Committee and the Student Athletic Advisory Board.

FALL TERM

Girls
Field Hockey
Soccer
Tennis
Cycling
Karate
Search & Rescue
Crew
Cross-Country
Ballet
Modern Dance
Squash

Boys
Football
Tennis
Cycling
Search & Rescue
Crew
Cross-Country
Soccer
Golf
Karate
Ballet
Modern Dance

WINTER TERM

Girls
Track
Swimming
Basketball
Skiing:
Competitive
Cross-Country
Paddle Tennis
Squash
Ballet
Modern Dance
Gymnastics
Search & Rescue

Boys
Track
Swimming
Hockey
Wrestling
Basketball
Skiing:
Competitive
Cross-Country
Paddle Tennis
Squash
Gymnastics
Search & Rescue
Ballet
Modern Dance

SPRING TERM

Girls
Softball
Track
Lacrosse
Tennis
Crew
Karate
Search & Rescue
Canoeing/Kayaking
Cycling
Ballet
Modern Dance

Boys
Baseball
Softball
Track
Lacrosse
Crew
Karate
Search & Rescue
Canoeing/Kayaking
Cycling
Tennis
Ballet
Modern Dance
Squash



Health Care

In the 1840's, the widow of Principal Osgood Johnson devoted herself to the care of sick Seminary students at Samaritan House, built and named for that purpose, now a student dormitory. In spite of this, rows of gravestones mark the toll of epidemics. An Academy graduate of 1890 reports that no such care as Widow Johnson's was available to the Academy students of the 1890's: "There was no infirmary. If you were ill, it was nobody's business but your roommate's, who brought you meals from Marland's unappetizing fare."

The Isham Infirmary-Hospital of Phillips Academy is accredited by the Joint Commission on Accreditation of Hospitals and is fully licensed as a hospital by the Commonwealth of Massachusetts. The hospital has an x-ray department and clinical laboratory with a full-time technician. Qualified physiotherapists are available either in the Infirmary or Trainer's Room. Graduate nurses are on duty twenty-four hours daily, and additional graduate nurses manage the Outpatient Services from 7:30 a.m. to 5:00 p.m. Isham Infirmary-Hospital is staffed and equipped to care for most problems, and nearby general hospitals are available for major surgery or serious emergencies.

In addition to the daily outpatient clinic held by the Medical Director, who is a specialist in internal medicine, regular clinics are conducted at Isham Infirmary-Hospital in dermatology, orthopedics, and dentistry. Staff consultants are available in most specialty fields of practice, and full-time clinical psychologists can provide professional counseling.



Tuition, Financial Aid, and Expenses

Tuition 1977-78

Annual tuition fees for 1977-78 are $4500 for boarding students and $3500 for day students (who must live in Andover, North Andover, North Reading, Methuen or Lawrence). Normally, one-half of the tuition is payable on August 15, and one-half on December 15.

Tuition may also be paid in ten equal monthly installments starting on August 1 and ending on May 1. A service charge of one percent of the total year's tuition is made for this plan. Another alternative is the use of the Insured Tuition Payment Plan, arranged with a private agency. Information about these two alternatives and application forms are sent to parents before the first bill is due.

No rebate will be made against the amount of the tuition installment due on August 15 for any student who for any reason is dismissed or withdrawn after the opening of school in the fall. No rebate will be made against the tuition installment due on December 15 for any student who is dismissed or withdrawn after returning to school at the beginning of the winter trimester.

The tuition charge covers instruction, board, room (including basic furniture), physical training and most athletic privileges, use of laboratory equipment and material, admission to all authorized athletic contests and the authorized entertainments at George Washington Hall or elsewhere on campus, including the Saturday evening motion pictures. An additional charge of $30 is due with the first tuition payment for providing and laundering bed linen of the boarding student.

The tuition charge does not include tutoring,

language training, special instruction in music or certain athletics, materials fees for art courses, medical insurance, dental care, special medical expenses, laundry, textbooks, dues to school organizations, or breakage and damage to school property. All protective athletic equipment and uniforms are furnished by the school; however, all students are required to bring their own footwear and urged to bring along whatever other personal athletic equipment they already possess. Bills for items not included in the regular tuition charge may be rendered at any time during the school year.

Students otherwise eligible to return in a given school year will not be allowed to register if their school accounts for the preceding year have not been paid in full. The diploma of the Academy will not be awarded to students whose school accounts are not paid in full by June 1.

Parents or students may open a student drawing account at the Treasurer's Office for personal expenses during the school year.

Other Expenses

As a rough guide to parents in budgeting for the total expected expenses of each academic year, the following low-average approximations of extras are given.

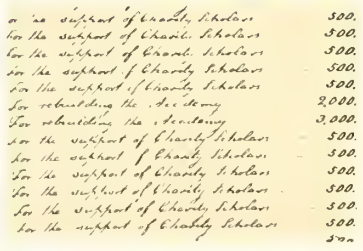
Travel	According to home location
Athletic equipment	$ 75.00
Laundry and cleaning	125.00
Medical insurance (optional)	35.00
Books and supplies	150.00
Dues, publications and charitable contributions	20.00
Breakage deposit (refundable)	50.00
Miscellaneous, including spending money	120.00

Financial Aid

Nearly one-third of each student's educational cost is paid by income from the school's $57,000,000 endowment, a product of the generosity of past Andover graduates, parents and friends. Above and beyond that, Andover has budgeted nearly a million dollars in student financial aid for 1977-78 — a total of $935,000, approximately $200,000 of which is reserved for new students.

Over three hundred families receive financial aid in the form of a scholarship grant, a long-term low interest loan or a combination of both. The dollar amount of the assistance varies from $500 to full tuition. Each family indicating a need for assistance on the Preliminary and Final Applications will be mailed a Parents' Financial Statement which is processed by the School Scholarship Service in Princeton, N.J.

All awards are reviewed annually and a Parents' Financial Statement must be filed each year if continued aid is needed.



In 1789, the first scholarship monies are recorded, from John Phillips, "in consideration of further promoting the virtuous and pious education of Youth, (poor children of genius and of serious disposition especially) in Phillips Academy, founded in Andover, Massachusetts."

Admissions

Phillips Academy admits students of any sex, race, color, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded or made available to students at the school. It does not discriminate on the basis of sex, race, color, national and ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs, and athletic and other school-administered programs.

The school's constitution, written in 1778, states that Andover "shall be ever equally open to youth of requisite qualifications from every quarter." With this principle in mind, the basic requirement for admission to Andover today continues to be evidence of sound character and strong academic achievement. The school is especially interested in candidates who demonstrate maturity and concern for others in addition to high performance in particular studies or activities. Valuing diversity in its student body, the school seeks to bring together a community from all parts of the country and from many nations.

The Admissions Committee selects from over two thousand candidates the three hundred fifty most promising and deserving young people. The school's endowment covers approximately one-third of the cost of an Andover education. Therefore, in fact, every student receives financial aid. In addition, thanks to the generosity of a large number of alumni and friends, further financial assistance is available (see Financial Aid Section).



APPLICATION PROCEDURE

Priority will be given to those candidates who complete the application procedure by February 1, and they may expect a decision from the Admissions Committee by March 10. The possibility of admission is considerably lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of $100 is required to reserve a place at the time admission is offered to an applicant.

The four steps for Application

1 Submit the Preliminary Application Card and the non-refundable $15 fee as soon as possible. (Checks are payable to the Trustees of Phillips Academy.)

2 Complete the Personal Interview requirement. An interview is required of all applicants. A visit to the Academy is desirable as it gives candidates a chance to have questions answered and to see the school. Candidates who cannot visit the Academy are themselves responsible for arranging an interview with an Alumni representative. (See page 52.)

3 Return the Final Application Forms. Final Application Forms are mailed in mid-November to candidates who have submitted a Preliminary Application card for the following fall. Forms should be returned within three weeks of receipt. (Late applicants should return forms immediately.)

4 Take the Secondary School Admissions Test. (12th Grade or Postgraduate candidates should refer to the information on this page.)

Secondary School Admissions Test

The Bulletin of Information for Candidates, published by the Educational Testing Service, Princeton, NJ 08540, will be sent by Andover to all 1978-1979 candidates who have filed a Preliminary Application. This Bulletin describes the Secondary School Admissions Test, which will be given on the following dates:

December 10, 1977 — March 4, 1978
January 21, 1978* — April 29, 1978*
June 17, 1978

* International administration

Candidates are strongly urged to take the SSAT administered in December, 1977. (The December tests will not be given in foreign countries.) Otherwise, the candidate should take the January, 1978 administration.

Senior Class Candidates

Instead of the Secondary School Admissions Test, Senior and Postgraduate candidates must take the



Preliminary Scholastic Aptitude Test or the College Board Scholastic Aptitude Tests. (C.E.E.B., Box 592, Princeton, NJ 08540). After the test date candidates must ask the College Board, in writing, to send all test results to Phillips Academy. A check or money order for $2 made out to C.E.E.B. must accompany that request. A number of well-qualified Postgraduates admitted each year are treated as full-fledged members of the Senior Class and are eligible for all school activities. Because of their academic credits, they frequently have maximum flexibility in course selection.

Whom to Contact at Andover

If you have questions about Andover's admissions or application procedures, please contact the Admissions Office.

Director of Admissions:	Joshua L. Miner
Address:	Admissions Office Phillips Academy Andover, Massachusetts 01810
Office hours:	Monday through Friday, 9:00 a.m. to 5:00 p.m. Saturday, 9:00 a.m. to 12:00 noon
Telephone:	617/475-3400

Early Decision

Andover will not participate in any early decision plan for admissions in September, 1978.

Alumni Representatives

Candidates who are unable to visit Andover should arrange an interview with one of the Alumni Admissions Committee members listed on the following pages. It is suggested that a telephone call be made or a letter sent in advance to establish a mutually convenient time. A candidate who finds it difficult to visit one of the interviewers listed should communicate with the Admissions Office in Andover. An effort will be made to locate an additional representative from that area among the graduates of either Phillips or Abbot Academy.

Admissions Interview Schedule

During the coming school year the representatives from the Administration plan to be in the following cities:

October 3-7	Seattle/Portland/San Francisco/Los Angeles
October 10-14	Lincoln/Omaha/Des Moines/Oklahoma City
October 17-22	Chicago/Cleveland/Detroit/Grand Rapids
October 24-29	Cincinnati/Milwaukee/Minneapolis
November 7-11	St. Louis/Atlanta/Kansas City
November 14-17	Memphis/Louisville
November 21-24	Albuquerque/Denver
December 5-9	Fort Worth/Dallas/Houston/New Orleans

Candidates who wish to be interviewed in one of these cities should make arrangements in advance. This may be done by notifying our Admissions Office or by calling the local Alumni Representative whose name is preceded by an asterisk.

ALABAMA

Birmingham
Miss Jacqueline Carter '72
P.O. Box 7964 35228

Robert B. Donworth, Jr. '42
Bradley, Arant, Rose & White
Suite 1500, Brown-Marx Bldg.
2000 First Avenue North 35203

Mobile
David F. Dean, M.D. '56
612 Montclaire Way West 36609

ALASKA

Anchorage
John K. Brubaker '55
2110 Otter Street 99504

Howard S. Reed '45
6112 Prosperity Street 99504

Douglas
Peter B. Eakland '63
P.O. Box 610 99824

Fairbanks
K. Andre McMullen '66
5003 Dartmouth Road 99701

Juneau
Cadmus Z. Gordon, Jr. '16
The Teen Age Club
Box 1153 99801

ARIZONA

Litchfield Park
George T. French '29
P.O. Box 578
609 North Litchfield Road 85340

Phoenix
Mrs. William M. Riegel '53
4941 East Rockridge Road 85018

Scottsdale
Mrs. William E. Dampier '47
4721 North 70th Street 85257

Tucson
Keith S. Brown '31
3200 North Swan Road 85716

John S. Greenway '42
1634 North Olsen Avenue 85719

Donald B. Rollings '70
3801 E. Calle Barcelona 85716

ARKANSAS

Little Rock
Mose Smith III, M.D. '48
5326 West Markham Street 72205

CALIFORNIA

Beverly Hills
John J. Leone '66
William Morris Agency
151 El Camino 90212



Thompson K. Vodrey '52
1529 Gilcrest Drive 90210

Cotati
Ivan B. Higgins '62
P.O. Box 836 94928

Davis
Donald M. Reynolds '38
4 Parkside Drive 95616

Fresno
Geoffrey M. Brittin, M.D. '52
5688 Columbia Drive South 93727

Irvine
John E. Kidde '64
4881 Royce Road 92715

La Jolla
William S. Creighton '39
1011 Skylark Drive 92037

Los Altos
Philip J. Kann '71
327 Lunada Court 94022

Los Angeles
*David A. Cathcart '57
Gibson, Dunn & Crutcher
515 South Flower Street 90071

George W. Davis III, M.D. '52
4616 Keniston Avenue 90043

Walter L. Farley, Jr. '28
12300 1st Helena Drive 90049

Trevor A. Grimm '56
Kaplanis & Grimm
551 South Oxford Avenue 90020

Manhattan Beach
Mrs. James P. Regan '57
1717 Highland Avenue 90266

Marysville
Harold S. Edwards '28
770 Ramirez Road 95901

Mill Valley
Peter W. Lee '60
80 Montecimas Avenue 94941

Pacific Palisades
Mrs. Peter R. Mann '49
1422 No. Capri Drive 90272

Palo Alto
Henry E. Riggs '53
634 Lowell Avenue 94301

Donald A. Way '63
P.O. Box 338 94302

Pasadena
Russell M. Decker '56
691 Holladay Road 91106

Rancho Palos Verdes
Thomas J. Keefe, Jr. '50
6866 Crest Road 90274

Riverside
Peter C. Parsons '55
Riverside County Publishing Co.
P.O. Box 8368 92505

Ross
H. Leonard Richardson '45
1 Circle Drive 94957

San Diego
Norman R. Allenby '51
3222 Quimby Street 92106

San Francisco
Letitia Upton Brown '63
2940 Clay Street 94115

Miss Dorothy M. Easton '61
1376 Clayton Street 94114

*Alan L. Fox '60
1810 Green Street 94123

Thomas E. Pollock III '61
Cooley, Godward, Castro
Huddleson & Tatum
1 Maritime Plaza, Suite 2000 94111

William W. Sterling '57
Heller, Ehrman, White & McAuliffe
30th Floor
44 Montgomery Street 94104

Santa Barbara
Mancel T. Clark, Jr. '28
607 San Ysidro Road 93108

Santa Monica
Patrick J. O'Hern '66
2045 4th Street, #205 90405

Sebastopol
William D. Lynch '38
10592 Occidental Road 95472





Shingle Springs
Marshall T. Gleason '33
3067 Cambridge Road 95682

COLORADO
Aspen
Stephen W. Harris '38
P.O. Box 1653 81611

John P. McBride '56
105 Pacific Avenue 81611

Colorado Springs
Mrs. William Boddington '41
1433 Alamo Avenue 80907

Denver
*Peter Grant '49
545 Race Street 80206

John F. Malo '40
Malo Feed Company
909 17th Street, Suite 305 80202

David C. Wilhelm '38
204 Livestock Exchange Bldg. 80216

Glenwood Springs
Rev. George P. Pierce '49
546 Hyland Park Drive 81601

CONNECTICUT
Greenwich
Gerard E. Jones '55
Deer Lane 06830

Roger S. Seymour '44
50 Porchuck Road 06830

New Haven
Nathaniel M. Cartmell, Jr. '42
282 Prospect Street 06511

Westport
Robert B. Simonton '50
25 Woody Lane 06880

DELAWARE
Wilmington
Mrs. Robert Bryant '65
2309 Saymoure Road 19805

Mrs. Reeves W. Hart, Jr. '47
18 Briar Road, Briarwood 19803

DISTRICT OF COLUMBIA
Washington
George W. Beatty '50
3438 34th Place, N.W. 20016

Christopher D. Costanzo '59
Department of State 20520

*Lawrence C. Dalley, Jr. '45
Group Insurance Administrators, Inc.
888 17th Street, N.W. 20006

Andrew P. Ireland '48
1513 Longworth Bldg. 20515

J. Kenneth McDonald '50
History Department
George Washington University 20052

FLORIDA
Gainesville
Richard M. Cohen '61
4313 N.W. 32nd Street 32605

Jacksonville
Arthur W. Milam '45
Milam & Wilbur
P.O. Box 58 32201

Robert D. Van Cleve '50
Riverside Clinic
2005 Riverside Avenue 32204

Key Biscayne
Carlos M. de la Cruz '59
300 Island Drive 33149

Miami
Mrs. Constantinos Emmanuel '54
6971 S.W. 134th Street 33156

David J. Williams II '38
13815 S.W. 84th Street 33143

Naples
Robert W. Hattemer '49
440 Spinnaker Drive 33940

Pompano Beach
Schuyler Van Ingen '36
854 South Federal Highway 33062

Sarasota
Parker C. Banzhaf '38
3435 Sea Grape Drive 33581

Michael T. Madison '65
The Marie Selby Botanical Gardens
800 S. Palm Avenue 33577

John D. Pitts '56
324 Bob White Way 33577

Tallahassee
Jerry L. Draper '57
2026 W. Indianhead Drive 32301

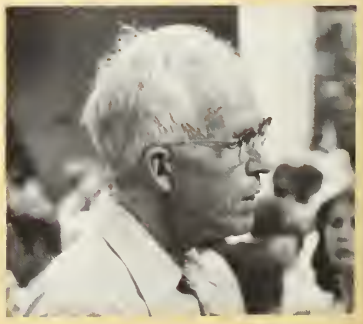
Winter Haven
Richard C. Cheney '48
1826 Sixth Street, S.E. 33880

GEORGIA
Augusta
Samuel C. Dysart, Jr. '46
c/o Dymo Visual Systems, Inc.
P.O. Box 1568 30903

Atlanta
D. Hayes Clement '54
Arthur Andersen & Co.
25 Park Place, N.E. 30303

Herbert R. Elsas '28
Sutherland, Asbill & Brennan
3100 First National Bank Tower
30303

*Peter C. Mohr '54
1035 Angelo Court, N.E. 30319



Columbus
William S. Cain, Jr. '40
P.O. Box 2125 31902

Savannah
William C. Rhangos, M.D. '49
Savannah Orthopedic Clinic, P.C.
210 East Hall Street 31401

Stone Mountain
Ernest Matton '55
4389 Bramwell Drive 30083

HAWAII
Honolulu
Mrs. Kyran M. O'Dwyer '55
6240 Keokea Place 96825

Thomas L. Stirling '59
Kelso, Spencer, Snyder & Stirling
Suite 1800
745 Fort Street 96813

IDAHO
Boise
Richard W. Hirst '28
1210 Happy Drive 83704

ILLINOIS
Buffalo Grove
Peter G. Pappas '63
430 Weidner Road 60090

Chicago
Arthur L. Kelly '55
P.O. Box 6800-A 60680

Robert B. Stearns '70
1825 North Lincoln Plaza
Apt. 2208 60614

Kenilworth
Mrs. Rita Kallman '52
535 Brier Street 60043

La Grange
*Ronald J. Floto '61
219 S. Spring Avenue 60525

Northfield
W. Newton Burdick, Jr. '35
217 Dickens Road 60093
(Office: Pandick Press, Inc.
111 North Canal Street
Chicago 60606)

Peoria
H. Vreeland Whittall '54
National Service U.S.C.D.
Caterpillar Tractor Co. 61629

Peoria Heights
Robert T. Stevenson, Jr. '53
4849 Grand View Drive 61614

Quincy
Mrs. Gary P. Hull '58
RR #5 62301

INDIANA
South Bend
Mrs. Robert E. Oswald '56
3102 South Miami Street 46614

IOWA
Davenport
Craig W. Nordeen '70
6204 Scott Street 52806

Des Moines
Paul M. Nelson '68
4112 Lynner Drive 50310

KANSAS
Junction City
John G. Montgomery '58
Junction City Daily Union
814 North Washington Street 66441

Stilwell
James J. Fisher '56
Route #1, Box 242 66085

KENTUCKY
Bowling Green
B. Harris Todd III '71
613 Hampton Road 42101

Louisville
H. Hewett Brown '55
Mutual Benefit Life Insurance Co.
P.O. Box 70289
100 East Liberty Street 40202

Alexander C. Browne '60
Almstedt Bros.
425 W. Market Street 40202





Samuel S. Caldwell, Jr. '29
W. R. Willett Lumber Co., Inc.
849 Starks Building 40202

*Philip J. Sorota, D.C. '63
2704C Masemure Court 40220

LOUISIANA
New Orleans
Marshall L. Posey, Jr. '55
5501 Cherlyn Drive 70124

John W. Sibal '70
Ingram Corporation
4100 One Shell Square 70139

Shreveport
Donald A. Raymond, Jr. '32
1132 Erie Street 71106

MARYLAND
Annapolis
H. Richard Duden '43
Ferry Farms
N.A. Branch P.O. 21402

Baltimore
Gardner W. Smith, M.D. '49
1503 Old Orchard Lane 21204

Garrett Park
Thomas Rodes '54
Box 36 20766

Oxon Hill
Andrew J. Combe '60
9104 Locksley Road 20022

MICHIGAN
Birmingham
Mrs. William Reepmeyer '61
440 Chesterfield 48009



Detroit
James N. Candler, Jr. '60
c/o Dickinson, Wright, McKean, Cudlip & Moon
800 First National Bldg. 48226

Grand Rapids
Lloyd W. Moseley, Jr., M.D. '59
1753 Breton Road, S.E. 49506

Grosse Pointe
John F. Dolan '58
502 Lincoln Road 48236

Grosse Pointe Shores
William D. Dahling '46
60 Hawthorne Road 48236

Leland
George A. Ball II '49
603 North Lake Street 49654

Troy
Frederick G. Bahr '47
Dean, Bahr, Miko & Dean, P.C.
Northfield Financial Bldg., 12th Fl.
900 Tower Drive 48098

MINNESOTA
Arden Hills
Christopher L. Bretoi '72
4439 Arden View Court 55112

Duluth
Oliver M. Houx '57
2727 East 7th Street 55812

Long Lake
Thomas M. Crosby, Jr. '56
1612 Willow Drive 55356

Madison
Mrs. Robert Bly '47
Odin House, RFD 2 56256

Rochester
Douglas G. B. McGill, M.D. '47
303 S.W. 6th Avenue 55901

Wayzata
J. Kimball Whitney '46
559 Harrington Road 55391

MISSISSIPPI
Purvis
Michael R. Eubanks '58
Eubanks & Temple
Courthouse Square
P.O. Box 696 39475

Senatobia
R. Carl Horn '55
P.O. Box 5355, NW 3C 38668

Tupelo
John P. Baum, Jr. '60
1003 Chester Avenue 38801

University
Kenneth O. McGraw '62
Department of Psychology
University of Mississippi 38677

MISSOURI
Columbia
George C. Miller '35
600 South Greenwood 65201

David B. Rogers '59
2406 Ridgefield Road 65201

Jefferson City
Benner C. Turner '23
411 Hickory Street 65101

Joplin
Lawrence S. Crispell, M.D. '38
200 Center Bldg., Suite 30
20th and Connecticut 64801

St. Joseph
Robert A. Brown, Jr., '49
510 A Francis Street 64501

F. Gregg Thompson, M.D. '47
2714 Ashland Avenue 64506



St. Louis
*Jeremy T. Johnstone '48
36 Rio Vista Drive 63124

Mrs. Robert D. Mudd, Jr. '59
7 Country Aire 63131

Peter W. Schandorff '64
c/o John Burroughs School
755 S. Price Road 63124

John Shepley '42
9450 Old Bonhomme 63132

William M. Van Cleve '46
20 Black Creek Lane 63124

Eugene F. Williams '42
701 Barnes Road 63124

NEBRASKA
Omaha
Philip S. Kemp '43
740 North Happy Hollow Blvd.
68132

NEVADA
Deeth
William B. Wright, Jr. '50
Mary's River Ranch 89823

Las Vegas
William B. A. Bentley, M.D. '42
2804 Mason Avenue 89102

Mrs. Daniel T. Skelly '55
3131 Liberty Circle S. 89121

Reno
Robert S. Kimball III '51
Paine, Webber, Jackson & Curtis, Inc.
100 North Arlington Avenue 89501

NEW JERSEY
Summit
Carey Orr Cook '61
20 Greenbriar Drive 07901

Westfield
Mrs. William Timmins '59
710 Clark Street 07090

Wyckoff
Kenneth E. MacWilliams '54
470 Sicomac Avenue 07481

NEW MEXICO
Albuquerque
*John P. Eastham '45
7929 Academy Trail, N.E. 87109



Gregory H. Illanes, Jr. '38
424 12th Street, N.W. 87102

George F. Peters '62
906 11th Street, N.W. 87102

Santa Cruz
Thomas W. Mayer '61
P.O. Box 171 87567

NEW YORK
Bedford
John H. Odden '63
Rippowam-Cisqua School
Box 488 10506

Binghamton
David J. Adzigian '58
405 Manchester Drive 13903

Briarcliff Manor
Richard C. Gallop '56
Nichols Place 10510

Buffalo
Walter F. Stafford, Jr., M.D. '38
24 Tudor Place 14222

John N. Walsh, Jr. '39
25 St. Catherines Court 14222

Geneseo
John P. Linfoot '58
Youngs & Linfoot, Inc.
62 Main Street 14454

Jon H. Porter '58
71 Center Street 14454

Larchmont
Oliver Barres '39
2 Bayard Street 10538

New York City
Peter M. Capra '53
118 East 93rd Street 10028

Reginald B. Collier '45
136 East 80th Street 10021

William D. Hart, Jr. '36
Whitman & Ransom
522 Fifth Avenue 10036

Sven E. Hsia '59
35 East 85th Street 10028

Kenneth D. Krier '68
23 West 73rd Street
Apt. 214 10023

John D. Lynch '46
J. & W. Seligman & Co.
One Bankers Trust Plaza 10006

Arthur M. Rogers, Jr. '59
c/o Morgan Guaranty Trust Co.
23 Wall Street 10015

Roger L. Strong '44
Ernst & Company
100 Wall Street 10005

Mrs. Oscar L. Tang '57
120 East End Avenue 10028

Frederic C. Thomas '46
20 Waterside Plaza
Apt. 30F 10010

Pompey
William M. Tuck '54
Sweet Road 13138

Rochester
Bruce B. Bates '49
87 Grosvenor Road 14610

Barry C. Phelps '49
48 Palmerston Road 14618

Scarsdale
Howard T. DuBois '43
11 Lenox Place 10583



Syracuse
David H. Northrup '32
106 Wendell Terrace 13203

NORTH CAROLINA
Chapel Hill
*James R. Adriance '28
16 Rogerson Drive 27514

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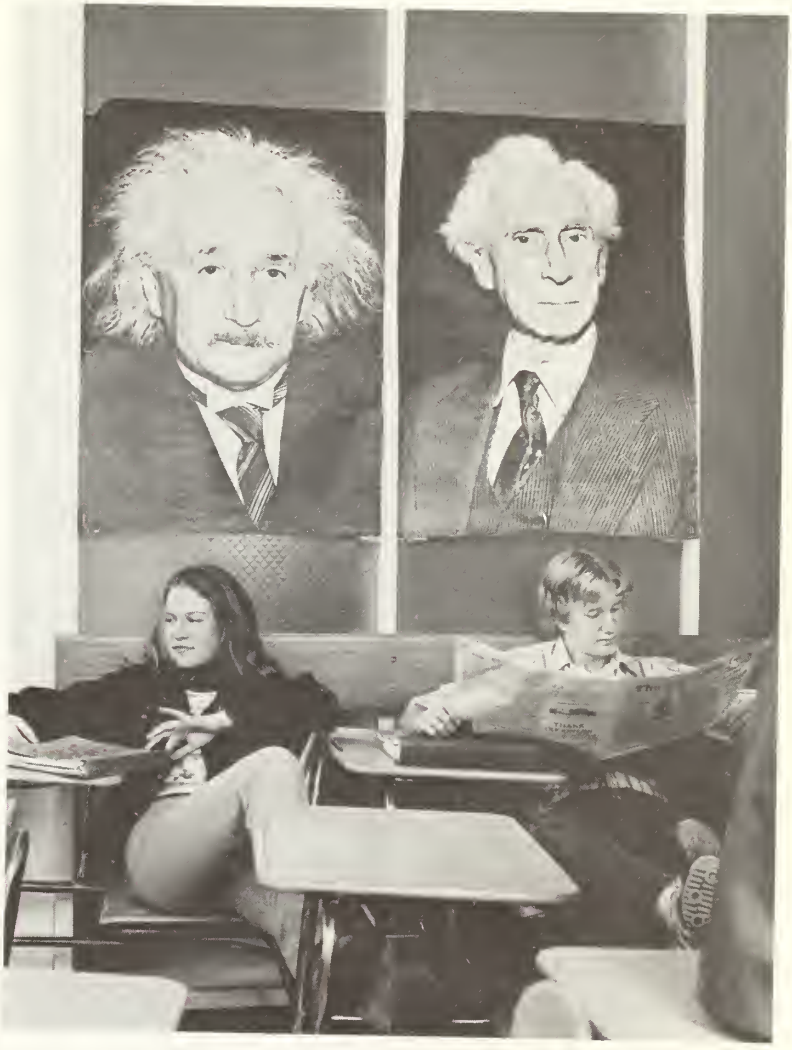
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B.A., Purdue University; M.A., Columbia

JAMES LEIGHTON BUNNELL (1967)
Director of Summer Session; Instructor in History and the Social Sciences
A.B., University of the South; A.M., Vanderbilt

JOSEPH BELLEAU WENNIK (1967)
Instructor in German
B.A., Yale; M.A., Middlebury

HILDA STROOP WHYTE (AA1967)
Instructor in Physical Science
B.S., Michigan State University; M.S., Tufts University

JAMES ROBERT WILSON (1967)
Dean of Short Term Institutes; Instructor in Chemistry
B.S., Stanford; A.M., Harvard; Ph.D., Harvard

SAMUEL IRVINE ALLISON ANDERSON (1968)
Instructor in French
A.B., Harvard; Diplome d'études, Université de Paris; A.M., Columbia; M.A., Massachusetts; M.A., Middlebury

DAVID OWEN COBB (1968)
Instructor in English
A.B., University of Maine
A.M., Middlebury

DONALD HAVERSTICK GOODYEAR, JR. (1968)
Instructor in English
A.B., Williams; A.M., Harvard; Ph.D., Harvard

FRANK LEE HANNAH (1968)
Instructor in Mathematics
A.B., Dartmouth; A.M., Dartmouth

MARJORIE ALEXANDER HARRISON (AA1968)
Instructor in Physical Education
A.B., Connecticut College

ALOYSIUS JOHN HOBAUSZ (1968)
Director of the Audio-Visual Center
S.B., Puskas Telecommunication Institute, Budapest

NICHOLAS VAN HOUTEN KIP (1968)
Instructor in Classics and Mathematics
A.B., Princeton; M.A., Trinity

CATHERINE JEANNE KIRKLAND (AA1968)
Instructor in French
Licence ès Lettres, Sorbonne; Maitrise, Sorbonne

CHRISTOPHER DUNBAR KIRKLAND (1968)
Instructor in English
A.B., Harvard

SUSAN McINTOSH LLOYD (AA1968)
Dean of Pine Knoll Cluster; Instructor in History and the Social Sciences
A.B., Radcliffe; M.A.T., Harvard

#JOHN KENNEDY McMURRAY (1968)
Instructor in Art
B.A., Washington and Lee University; M.A.T., Harvard

RICHARD STOCKTON MacNEISH (1968)
Director of the Robert S. Peabody Foundation for Archaeology; Instructor in Archaeology
A.B., University of Chicago; M.A., University of Chicago; Ph.D., University of Chicago

STEPHANIE BLAKE PERRIN (AA1968)
Instructor in Art and Psychology on the Abbot Academy Association Program
A.B., Boston University; M.A.T., Harvard

CHARLES EMORY APGAR III (1969)
Chairman of the Physics Department Instructor in Physics
A.B., Earlham College; M.A.T. Brown

SUSAN B. CLARK (AA1969)
Instructor in Classics
A.B., Swarthmore College; M.A., Yale

MARION FINBURY (AA1969)
Co-Director of College Counseling
A.B., Vassar

#JERRY FOSTER (1969)
Director of New Programs Office; Instructor in English
A.B., University of Southern California; M.A., University of California at Los Angeles

RICHARD CHARLES GRIGGS (AA1969)
Associate Director of Admissions; Director of Financial Aid
A.B., Princeton

THOMAS ROBERT HAMILTON (1969)
Instructor in Biology
B.S., Tusculum College; M.S., University of Pennsylvania; M.A.T., Brown University

GEORGES NICOLAS KRIVOBOK (AA1969)
Director, School Year Abroad Rennes, France through 1976–77; Instructor in French and Russian
B.A., Swarthmore; M.A., Middlebury

RICHARD EUGENE SHEAHAN (AA1969)
Associate Secretary of the Academy

CARROLL WESLEY BAILEY (1970)
Dean of Abbot Cluster; Instructor in English
A.B., University of Pittsburgh; J.D., University of Pittsburgh

PETER JOSEPH BALEYKO (1970)
Assistant to the Comptroller
S.B., Boston College

FRANCIS EMANUEL BELLIZIA, JR. (1970)
Instructor in English
A.B., Dartmouth; A.M., Middlebury

PAUL KALKSTEIN (1970)
Instructor in English
A.B., Princeton; M.A.T., Yale

GILBERT TENNANT SEWALL II (1970)
Instructor in History and the Social Sciences
A.B., University of California, Berkeley; A.M., Brown

JOHN MacDONALD SNYDER (1970)
Curator of Photography, Addison Gallery of American Art; Instructor in Art
A.B., Yale

FRANCIS GORDON SOULE (1970)
Medical Director
A.B., Dartmouth; M.D., F.A.C.P., New York University School of Medicine

HENRY BOND WILMER, JR. (1970)
Instructor in French
B.A., Davidson

DOUGLAS EVERETT CRABTREE (1971)
Instructor in Mathematics
A.B., Bowdoin; M.A., Harvard; Ph.D., University of North Carolina

ROBERT LEE CRAWFORD (1971)
Co-Director of College Counseling; Instructor in History and the Social Sciences
B.A., Northwestern; S.T.B., The General Theological Seminary; M.A., University of Pennsylvania

#GLENN FRANK BASTIAN (1972)
Instructor in Biology and English
A.B., University of Pittsburgh

#KEDER BAYARD (AA1972)
Instructor in Mathematics
M.S., Université d'Haiti; M.A.L.S., Wesleyan

GEORGE MacNAMARA DIX (1972)
Instructor in Modern Languages
A.B., Brown; A.M., Middlebury

BARBARA E. HAWKES (AA1972)
Instructor in Biology
A.B., Tufts; M.S., Northeastern

HENRY LYNN HERBST (1972)
Instructor in French
A.B., Hamilton College; A.M., University of Pennsylvania

ALEXANDRA REWIS KUBLER-MERRILL (AA1972)
Counselor and Instructor in Psychology
B.A., Smith; M.A.T., Yale

GEORGE A. NEILSON, JR. (1972)
Business Manager
B.S., Boston University; M. Ed., Boston University

EDWARD JAY SARTON (1972)
Chairman of the Andover Evening Study Program; Instructor in Physics
B.S.E., Princeton; M.S.E., University of Southern California

THEODORE JOHN WARREN, JR. (AA1972)
Protestant Chaplain; Instructor in Religion
B.S., Paul Quinn College; B.D., Payne Seminary, Wilberforce University

STEPHEN B. WICKS (AA1972)
Instructor in Art

LESLIE BALLARD (1973)
Instructor in Chemistry and Biology
B.A., Sarah Lawrence; M.A.T., Harvard

YOLANDE BAYARD (1973)
Instructor in French
B.S., Central Connecticut State College; M.A., Central Connecticut State College

#SUSAN J. CLARKE (1973)
Curator of American Art at the Addison Gallery
A.B., Smith; A.S., University of Michigan

SALLY ELAINE FISCHBECK (1973)
Instructor in Mathematics
A.B., University of Rochester

DOUGLAS RAY HARDIN (1973)
Instructor in Physical Sciences
A.B., Harvard; Ph.D., University of Cambridge

MAURY PAUL HEPNER (1973)
Instructor in Mathematics
B.S.E., Princeton; M.A., Harvard; Ph.D., Harvard

CAROL ANN IRISH (1973)
Instructor in English
A.B., William Jewell College; M.A., University of Minnesota; Ph.D., University of Minnesota

ROBERT PETER PERRIN (1973)
Instructor in Mathematics and Physics
B.S., Massachusetts Institute of Technology; Ph.D., Massachusetts Institute of Technology

EDWIN GUSTAVUS QUATTLEBAUM III (1973)
Instructor in History and the Social Sciences
A.B., Harvard; M.A., University of California; Ph.D., University of California

NANCY FAUST SIZER (1973)
Instructor in History and the Social Sciences
B.A., Wellesley; M.A., Harvard

ELWIN SYKES (1973)
Instructor in English
A.B., Harvard

MARY L. VAN DUSEN (1973)
Instructor in Remedial Languages
A.B., Wellesley; M.ed., Lesley College

CHARLES EDUARDO WHITEHEAD (1973)
Instructor in Spanish
A.B., Princeton; A.M., Harvard

PRISCILLA KEENE BELLIZIA (1974)
House Counselor
A.B., Bates; M.A.T., Brown

HELEN SCHNEIDER BEST (1974)
House Counselor
B.S., Seattle University

CAROLYN B. BRECHER (1974)
Instructor in Modern Dance
A.B., Bard College

ROBERT DICKERSON DRENNAN (1974)
Associate Director of Robert S. Peabody Foundation; Instructor in Anthropology
A.B., Princeton; M.A., University of Michigan; Ph.D., University of Michigan

PATRICIA HOPE EDMONDS (1974)
Development Officer for Foundations; House Counselor
A.B., Mount Holyoke; M.A.T., Radcliffe

CHRISTOPHER JUDE GURRY (1974)
Instructor in Physical Education; Instructor in History and the Social Sciences
A.B., Harvard

JUDITH ADAMS HAMILTON (1974)
Dean Flagstaff Cluster
A.B., Tusculum College

VICTOR WILLIAM HENNINGSEN III (1974)
Assistant to the Headmaster; Instructor in History and the Social Sciences
A.B., Yale

SALLY CHAMPLIN HERBST (1974)
House Counselor
A.B., Mount Holyoke College

MARC DANA KOOLEN (1974)
Instructor in Biology
B.S., St. Lawrence University

JEAN CRAWFORD McKEE (1974)
Director of Admissions for the Complementary Schools Project
B.A., Middlebury

ELAINE SPATZ RABINOWITZ (1974)
Instructor in Painting
B.A., Antioch; M.F.A., Tufts University and Museum School

NATALIE GILLINGHAM SCHORR (1974)
Instructor in French
B.A., McGill; d.e.s., Aix-Marseille; M.A., University of Pennsylvania

WILLIAM E. THOMAS (1974)
Chairman of the Music Department; Instructer in Music
B.A., Oberlin; M.F.A., Pennsylvania State University

BARBARA LEE WICKS (1974)
House Counselor

DONALD HENRY BADE (1975)
Comptroller
B.B.A., University of Wisconsin

HELEN M. ECCLES (1975)
Director of Public Information; House Counselor
A.B., Bryn Mawr

DAVID TAVERNER HANSON (1975)
Instructor in Art
A.B., Stanford

DAVID EMMETT IRWIN, JR. (1975)
Instructor in Music
B.M., Florida State University; M.Mus., Yale Music School

HERBERT HARRY MORTON III (1975)
Registrar; Instructor in Mathematics
A.B., Dartmouth

CONSTANCE HALL STROHECKER (1975)
Director of Abbot Alumnae Affairs

RONALD DALE THORPE, JR. (1975)
Admissions Officer; Instructor in Latin
B.A., Harvard

SANDRA ANN URIE (1975)
Assistant to Director of Bicentennial Campaign; Instructor in Russian
A.B., Stanford

RICHARD H. WILSON, JR. (1975)
Instructor in Music
B.A., Harvard; M.Mus., New England Conservatory of Music

ELIZABETH D. AHERN (1976)
Instructor in Art
B.A., Boston University

JAMES W. ANTHONY (1976)
Instructor in English (Fall term only)
A.B., Emory; M.A., Emory

VINCENT B. J. AVERY (1976)
Roman Catholic Chaplain; Instructor in French and Philosophy
S.T.L., Ph.D., Academia Alphonsiana, Rome

ELAINE RANKIN BAILEY (1976)
Associate Cluster Dean
B.A., William and Mary

JOSEPH ASHMEAD CLAY (1976)
Instructor in Music
B.A., Princeton

WILLIAM E. DANIELS (1976)
Instructor in Mathematics
B.S.M.E., Rensselaer; M.A.L.S., Wesleyan

JANETTE ELIZABETH HANNAH (1976)
House Counselor
M.A., Edinburgh University, Scotland

LEE ALLAN KAPLAN (1976)
Visiting Instructor in Biology (Fall term only)
B.A., University of Chicago

SUZANNE EDDY KIP (1976)
House Counselor

PATRICIA A. KOZEL (1976)
Instructor in Mathematics
B.A., Colorado Women's College; M.S. University of Wisconsin-Milwaukee

MICHAEL ALLEN LOPES (1976)
Instructor in English
B.A., University of California-Berkeley; M.A., State University of New York at Stony Brook

HARRISON FAIRFIELD McCANN (1976)
President School Year Abroad
B.A., Williams; M.A., Middlebury

PHYLLIS WENDOVER POWELL (1976)
Dean of the Academy; Instructor in English and Russian
B.A., Wellesley; M.A., Harvard

CAROL CAMERON RICHARDS (1976)
House Counselor
A.A., Bennett

JENNY THORNTON SAGE (1976)
Admissions Officer
B.A., Smith

RONALD BRUCE SCHLOSS (1976)
Instructor in Chemistry; Coordinator of Social Activities
B.S., Stanford; M.S., Stanford

HOLLY RUTH SORENSEN (1976)
Instructor in English
A.B., Radcliffe

JONATHAN A. STABLEFORD (1976)
Instructor in English
B.A., Williams; M.A.T., Wesleyan

REBECCA MILLER SYKES (1976)
House Counselor
A.B., Radcliffe

BAIRD WOODRUFF WHITLOCK (1976)
Visiting Instructor in English
B.A., Rutgers; Ph.D. University of Edinburgh

ANN WICKINS CALDWELL (1977)
Associate Secretary of the Academy and Associate Director of the Bicentennial Campaign
A.B. University of Michigan

EVERETT GENDLER (1977)
Jewish Chaplain
B.A., University of Chicago; M.H.L., Jewish Theological Seminary

TEACHING FELLOWS

STEPHANIE BENNETT (1976)
Teaching Fellow in Spanish
B.A., Dickinson

SALLY BLOODGOOD (1976)
Teaching Fellow in Art
B.S., Skidmore

JAMES BALDRIDGE BRODERICK (1976)
Teaching Fellow in Modern Languages on Abbot Academy Association
A.B., Harvard

ANTOINETTE DAUE EGGER (1976)
Teaching Fellow in English on Abbot Academy Association
A.B., Mt. Holyoke

CHERYL ELISE GELZER (1976)
Teaching Fellow in Science
A.B., Harvard

PETER ADDLEY GILBERT (1976)
Teaching Fellow in English
B.A., Dartmouth

THOMAS SALKALD HODGSON (1976)
Teaching Fellow in Religion and Philosophy on Abbot Academy Association
B.A., Williams; M.A., Yale

MARTHA HAMILTON JOHNSON (1976)
Teaching Fellow in Mathematics
A.B., Dartmouth

JOHN RUSSELL McCULLOH (1976)
Teaching Fellow in History and the Social Sciences
B.A., Harvard

REGINA ASMAN NOLAN (1976)
Teaching Fellow in Religion and Philosophy on Abbot Academy Association
A.B., Smith

ELIZABETH JANE TAYLOR (1976)
Teaching Fellow in Classics
B.A., Dickinson

STEVEN CHANDLER VOORHEES (1976)
Teaching Fellow in Mathematics
B.A., Northwestern

CHARLES ALLEN WILLAND (1976)
Teaching Fellow in Science
B.S., Brown; M.S., University of South Carolina

FACULTY ASSOCIATES

YOLANDA R. BALLOU
Library Cataloguer
B.A. University of Massachusetts; M.L.S., Simmons College

#MARGARET F. COUCH
Reserve Book Librarian
A.B., Wheaton

PAULA SCALERA CROSS
B.A., Salem State; M.L.S., University of Rhode Island

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Lawrence General Hospital School of Nursing

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Associate Archivist

EVANGELINE MERRIAM
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BEATRICE MORREO, R.N.
Director of Outpatient Department Isham Infirmary-Hospital
Lenox Hill Hospital, New 'York; P.N.P., Northeastern University

JEANNETTE GRANGER MUNROE
Hostess at the Underwood Room

THOMAS POOL
Director of Food Services

RUTH MATTHEWS ROEHRIG
Assistant Director Audio Visual Center
B.A., Mt. Holyoke College

ANN P. ROYCE
Assistant in Audio Visual

CAROLYN D. SKELTON
School Organist
B.A., Hastings College; M.M., New England Conservatory

ELIZABETH RAGLE SOULE
Hostess Cooley House

MARGARET B. TOWNE
Circulation Librarian
B.S., Salem State

JOAN VERRETTE, R.N.
Supervisor Inpatient Department Isham Infirmary-Hospital
St. John's Hospital, Lowell

JOAN WALSH, R.D.H.
Dental Hygienist
Forsyth Dental School

SALLY SLADE WARNER
Assistant in Music Department, Academy Carillonneur
Ch.M., American Guild of Organists; A.A.G.O., American Guild of Organists

LOUISE ZURAWEL, R.N.
Assistant Supervisor Outpatient Department Isham Infirmary-Hospital
St. Luke's Hospital, New Bedford

LOUIS J. ZUPPARDI
Radiology Technologist
R.T., R.M.T., Lawrence General Hospital

ABBOT ACADEMY EMERITI

HELEN BEAN JUTHE
Instructor in History, Emerita
Altamonte Springs, Fl. 1920–1938

MARY CARPENTER DAKE
Instructor in Physical Education, Emerita
Andover 1925–1945

M. DOROTHY BAKER
Instructor in English, Emerita
Bath, England, 1945–1950

DOROTHEA WILKINSON
Instructor in English, Emerita
Fredericton, N.H. 1939–1953

MARGUERITE CAPEN HEARSEY
Headmistress, Emerita
Wellesley, 1936–1955

ANNA ROTH
Instructor in History, Emerita
Franklin, 1942–1956

MILDRED A. HATCH
Instructor in Latin, Emerita
Chester, N.H. 1946–1961

MARJORIE F. STEVENS
Instructor in Mathematics, Emerita
Andover, 1945–1961

ALICE CURTISS SWEENEY
Instructor in English, Emerita
Andover, 1935–1961

HOPE COOLIDGE
Director of Food & Housing, Emerita
Concord, 1938–1962

RAYMOND COON
Instructor in Music, Emeritus
Andover, 1946–1962

EDITH TEMPLE JONES
Instructor in French, Emerita
Fairhaven, Vt. 1954–1967

GERMAINE AROSA
Instructor in French, Emerita
Essex, 1945–1969

GARDNER SUTTON
Comptroller, Emeritus
Cambridge, 1947–1971

PHILLIPS ACADEMY EMERITI

ALICE THACHER WHITNEY
Recorder, Emerita
Andover, 1902–1950

DOUGLAS MANSOR DUNBAR, A.M.
Instructor in Mathematics, German and Bible, Emeritus
Andover, 1942–1958

ROSCOE EDWIN EVERETT DAKE, S.B.
Instructor in Chemistry, Emeritus
Green Valley, Ariz. 1921–1961

MILES STURDIVANT MALONE, Ph.D.
Instructor in History, Emeritus
Daytona Beach, Fla. 1937–1962

ELIZABETH EADES, A.B.
Director of the Library, Emerita
Williamsburg, Va. 1929–1963

EMORY SHELBY BASFORD, A.B.
Instructor in English, Emeritus
Andover, 1929–1964

FLOYD THURSTON HUMPHRIES, A.B.
Instructor in French, Emeritus
Naples, Fla. 1937–1964

JOHN SEDGWICK BARSS, A.M.
Instructor in Physics, Emeritus
Andover, 1923–1965

DONALD MILLER CLARK, M.D.
Medical Director, Emeritus
Peterborough, N.H. 1954–1965

ELBERT COOK WEAVER, A.M.
Instructor in Chemistry, Emeritus
Madison, Conn. 1943–1965

ALEXANDER DUNNETT GIBSON, A.M.
Instructor in French, Emeritus
McIndoe Falls, Vt. 1944–1967

KENNETH SMITH MINARD, A.M.
Assistant Dean of Students and Instructor in History, Emeritus
North Bridgton, Me. 1928–1968

ALFRED GRAHAM BALDWIN, A.B., B.D., D.D.
Instructor in Religion and School Minister, Emeritus
Andover, 1930–1968

DOUGLAS SWAIN BYERS, A.M.
Director of the Robert S. Peabody Foundation and Instructor in Anthropology, Emeritus
Andover, 1933–1968

CORNELIUS GORDON SCHUYLER BANTA, S.B.
Instructor in Mathematics, Emeritus
Andover, 1944–1968

JOHN BROMHAM HAWES, Ed.M.
Instructor in English and Assistant Dean, Emeritus
Weston, Vt. 1933–36, 1939–70

BARTLETT HARDING HAYES, JR., A.B.
Director of the Addison Gallery of American Art, and Instructor in Art, Emeritus
Andover, 1933–1969

FREDERICK JOHNSON, S.B., Sc.D.
Director of the Robert S. Peabody Foundation and Instructor in Anthropology, Emeritus
Andover, 1936–1969

WALTER GIERASCH, A.B.
Instructor in English, Emeritus
Pacific Grove, Calif. 1941–1970

LEONARD FRANK JAMES, A.M.
Instructor in History, Emeritus
Medomak, Me. 1932–1970

FRANCIS BERTRAND McCARTHY, A.B.
Instructor in English, Emeritus
Andover, 1941–1970

ALSTON HURD CHASE, Ph.D.
Instructor in Greek, Latin, and History, Emeritus
Berwick, Me. 1934–1971

GEORGE KNIGHT SANBORN, S.B.
Instructor in Mathematics and Biology, Emeritus
Kennebunkport, Me. 1928–1972

JAMES HOOPER GREW, D.es L.
Instructor in French, Emeritus
North Andover, 1935–1972

ROBERT WHITTEMORE SIDES, A.B.
Director of Admissions and Instructor in Mathematics and Navigation, Emeritus
Marblehead, 1938–1972

RICHARD VALENTINE HEALY, P.E.
Director of Physical Plant, Emeritus
Winchester, 1956–1972

ALLAN GEORGE GILLINGHAM, Ph.D.
Instructor in Latin and Greek, Emeritus
Corner Brook, Newfoundland, Canada, 1947–1974

ROBERT EDWARD MAYNARD, S.B.
Instructor in Mathematics, Emeritus
Andover, 1931–1974

WILLIAM RUSSELL BENNETT, JR., A.B.
Registrar, Emeritus
Kennebunk, Me. 1950–1974

JAMES RUTHVEN ADRIANCE, A.B.
Assistant to the Headmaster and Instructor in Religion, Emeritus
Chapel Hill, N.C. 1934–1975

NORWOOD PENROSE HALLOWELL, JR. A.B.
Instructor in English and Public Speaking, Emeritus
Andover, 1934–1975

FRANK FREDERICK DICLEMENTE, S.B.
Instructor in Physical Education, Emeritus
Andover, 1935–1975

HART DAY LEAVITT, A.B.
Instructor in English, Emeritus
Andover, 1936–1975

RICHARD SAWYER PIETERS, A.M.
Instructor in Mathematics, Emeritus
Eugene, Ore. 1938–1975

C. JANE SULLIVAN, Ed.M.
Director Abbot Alumnae Affairs, Emerita
North Andover, 1938–1975

CAROLYN ELIZABETH GOODWIN A.M.
Dean of the Academy, Instructor in Mathematics, Emerita
Andover, 1947–1976

ANNE LISE WITTEN, M.A.
Instructor in History and Social Sciences, Emerita
Montreal, Quebec, Canada, 1955–1976

WILLIAM ABBOT MUNROE, A.B.
Associate Treasurer, Emeritus
Andover, 1960–1976

STATISTICAL INFORMATION for 1976–77



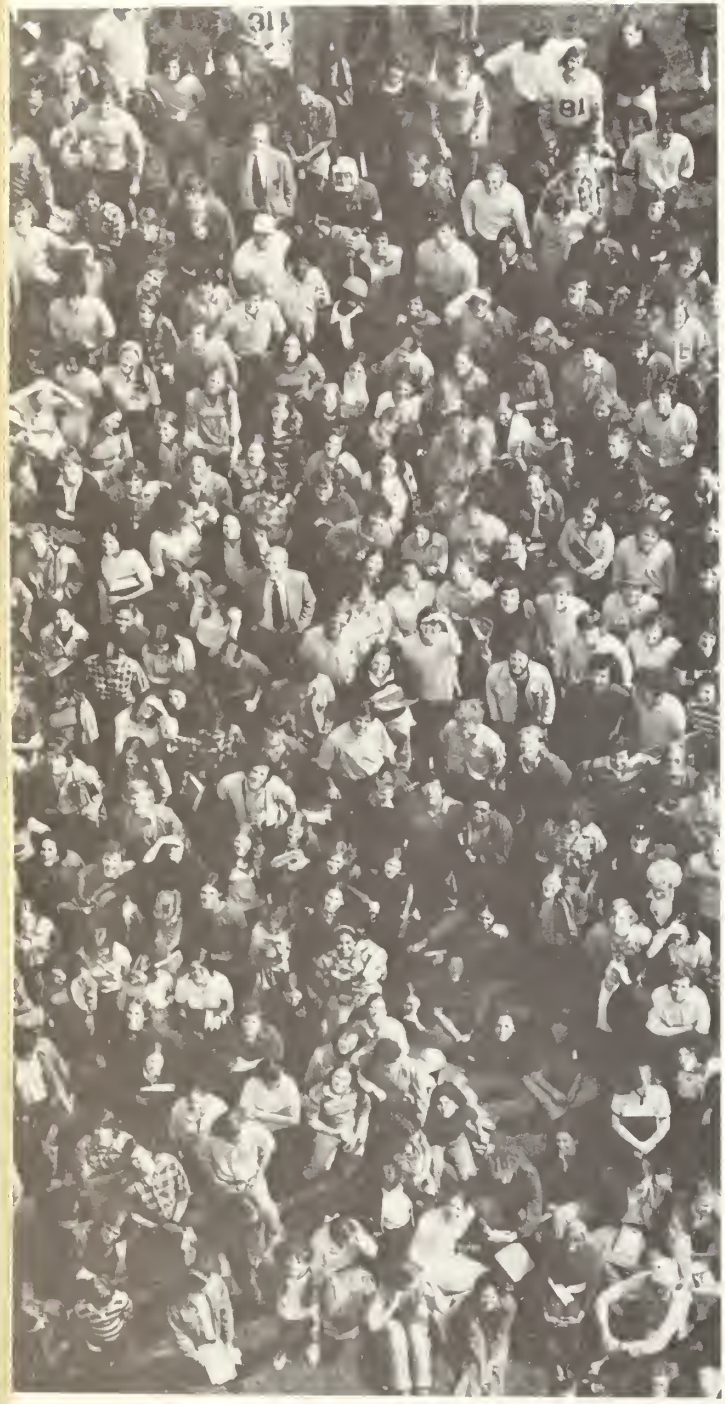
In 1864, Shimeta Neesima left Japan as a stowaway on the clipper ship "Wild Rover" for America and sold his samurai sword for a Chinese New Testament. He was adopted by the shipowner, an Andover Trustee, became Joseph Hardy Neesima, graduated from Andover in 1867, later from Amherst and the Andover Theological Seminary, and became the first Japanese to be ordained a Congregationalist minister. Neesima returned to Japan to found The Doshisha, a great university in Kyoto dedicated to Japanese and Christian ideals. Doshisha recently celebrated its 100th anniversary.

Geographical distribution

Alabama	1
Alaska	1
Arizona	2
California	39
Colorado	6
Connecticut	87
Delaware	2
District of Columbia	15
Florida	15
Georgia	4
Illinois	39
Indiana	6
Iowa	4
Kansas	3
Kentucky	3
Louisiana	7
Maine	20
Maryland	12
Massachusetts	381
Michigan	13
Minnesota	5
Mississippi	1
Missouri	7
Montana	1
Nebraska	3
Nevada	1
New Hampshire	27
New Jersey	42
New York	181
North Carolina	12
Ohio	19
Oklahoma	1
Oregon	5
Pennsylvania	33
Rhode Island	14
South Carolina	1
Tennessee	3
Texas	14
Vermont	12
Virginia	9
West Virginia	1
Wisconsin	4
Wyoming	1
Antilles	2
Bahamas	2
Bangladesh	1
Belgium	2
Bermuda	2
Canada	8
Canal Zone	1
Dominican Republic	1
El Salvador	1
England	5
France	2
Germany	3
Greece	1
Hong Kong	1
Japan	2
Korea	3
Kuwait	1
Malaysia	1
Mexico	2
Norway	1
Pakistan	1
Puerto Rico	1
Saudi Arabia	1
Thailand	2
Turkey	3
Venezuela	4
Virgin Islands	2
West Indies	1

	Total	Boys	Girls
Seniors	336	231	105
Uppers	346	221	125
Lowers	291	183	108
Juniors	141	92	49
Totals	1114	727	387

Total Boarding Students	943
Total Day Students	171
	1114



College Admissions

Admission to colleges is not based on a student's mere presence in a competitive academic community such as this one, but is based on how well the student has used this experience. All selective colleges exercise judgments relative to factors over and above academic ability in selecting a freshman class. While some of these factors relate to exceptional talents in one area or another, others are related to diversity in background and educational objectives.

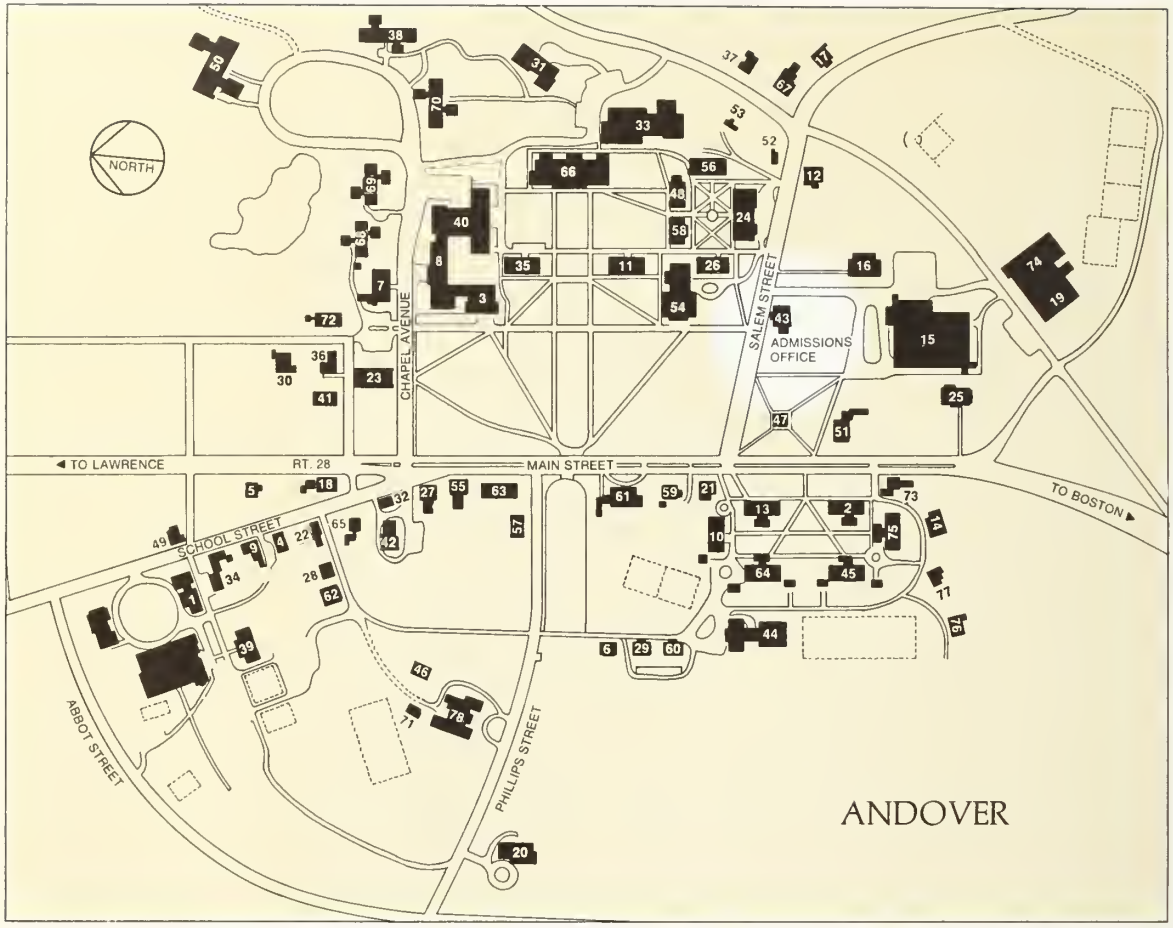
The college admissions picture is entirely different and infinitely more complex now than it was in past decades. Competition for admission to selective colleges is rigorous, and Andover students are encouraged to apply across a range of choices to colleges with varying degrees of selectivity. The one constant in all of this should be a real desire to educate oneself. To this end the college Counseling Office works with the class as a whole and with each candidate to help each one draw up a list of colleges that makes sense.

Phillips Academy seniors go to college well prepared for the academic program and social experience that lies ahead.

The Class of 1977 applied to 147 different colleges and matriculated at approximately 80 colleges and universities across the country.

College Matriculations for the Class of 1976

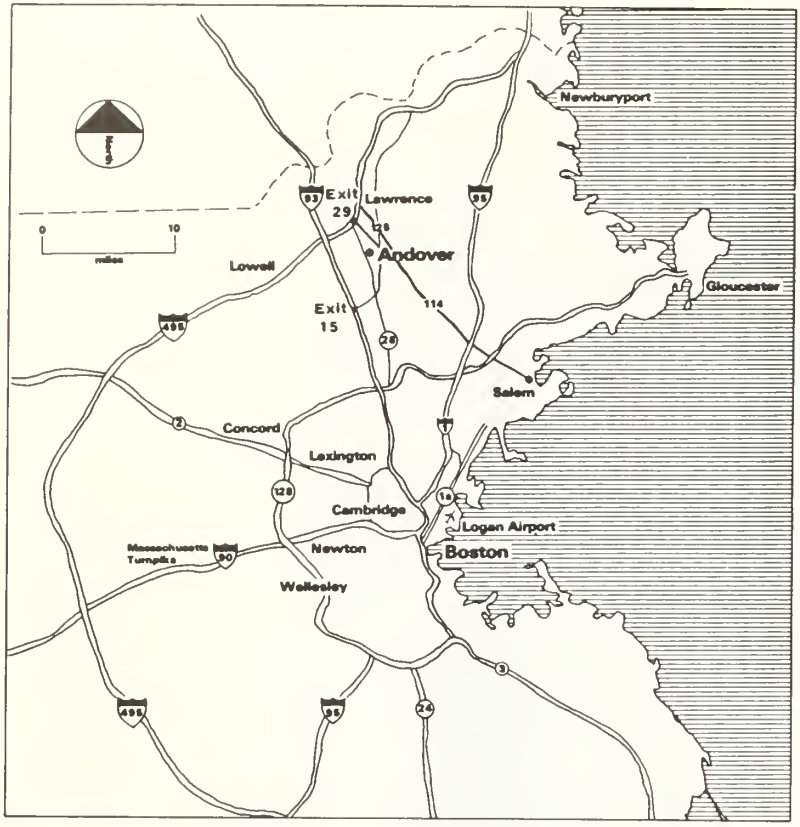
COLLEGE	ADMITTED	MATRICULATED
Amherst	28	5
Univ. of Arizona	1	1
Barnard	10	3
Bates	10	5
Beloit	5	1
Berklee College of Music	1	1
Boston College	12	2
Boston University	16	3
Bowdoin	8	3
Brown	33	13
Bucknell	12	2
Univ. of California		
Berkeley	12	5
Santa Cruz	6	1
Carleton	14	1
Carnegie Mellon	5	5
Case Western Reserve	1	1
Univ. of Chicago	5	2
Colby	8	1
Colgate	11	1
Univ. of Colorado	10	4
Columbia	21	8
Connecticut	16	3
Cornell	19	7
Dartmouth	29	16
Denison	10	2
Dickinson	7	3
Duke	25	8
Earlham	1	1
Univ. of Florida	2	1
Franklin & Marshall	5	3
Georgetown	25	4
Georgia Tech.	2	1
Hamilton	2	1
Hampshire	2	1
Harvard	49	39
Hobart	6	2
Howard	1	1
Johns Hopkins	37	5
Lafayette	10	3
Lawrence	2	1
Lewis & Clark	6	2
Univ. of Lowell	1	1
MIT	8	2
Univ. Mass at Amherst	29	6
Univ. of Michigan	8	5
Middlebury	9	6
Mt. Holyoke	5	2
Mt. Vernon	1	1
Univ. of New Hampshire	6	2
New York Univ.	5	1
State Univ. of NY	3	1
Univ. of North Carolina	10	1
Northwestern	32	6
Notre Dame	1	1
Oberlin	13	7
Occidental	3	1
Ohio University	1	1
Ohio Wesleyan	7	5
Univ. of Oregon	3	1
Univ. of Pennsylvania	27	5
Pomona	9	3
Princeton	48	13
Reed	5	2
Rensselaer Polytech.	12	2
Rhode Island School of Design	1	1
Rice	2	2
Univ. of Rochester	29	7
St. Lawrence	8	1
Sarah Lawrence	2	1
Smith	14	7
Univ. of Southern California	2	1
Southern Methodist	1	1
Springfield	1	1
Stanford	18	12
Swarthmore	9	4
Syracuse	10	3
Trinity	19	2
Tufts	27	6
Tulane	3	1
Union	7	2
U. S. Military Academy	2	2
Vassar	23	3
Univ. of Vermont	27	8
Univ. of Virginia	24	10
Wake Forest	1	1
Washington Univ.	8	1
Washington & Lee	4	1
Univ. of Washington	1	1
Wellesley	5	1
Wesleyan	24	13
Wheaton	5	1
Webster	1	1
Williams	13	3
Yale	51	24


NORTH
CHAPEL AVENUE
SALEM STREET
ADMISSIONS OFFICE
◄ TO LAWRENCE
RT. 28
MAIN STREET
TO BOSTON ►
SCHOOL STREET
ABBOT STREET
PHILLIPS STREET
ANDOVER

INDEX TO BUILDINGS

1 Abbot Hall
2 Adams Hall*
3 Addison Art Gallery
4 Alumni House*
5 America House*
6 Andover Cottage*
7 Andover Inn
8 Arts Center
9 Bailey House*
10 Bancroft Hall*
11 Bartlet Hall*
12 Benner House (Art)
13 Bishop Hall*
14 Blanchard House*
15 Borden and Memorial Gymnasium
16 Bulfinch Hall (English)
17 Burtt House*
18 Carter House*
19 Case Memorial Cage
20 Chapin House*
21 Churchill House*
22 Clement House*
23 Cochran Chapel
24 Commons (Dining Hall)
25 Cooley House
26 Day Hall*
27 Double Brick House*
28 Draper Cottage*
29 Eaton Cottage*
30 Eighty-Seven Bartlet Street*
31 Elbridge Stuart House*
32 Engineering Building
33 Evans Hall (Science)
34 Flagg House*
35 Foxcroft Hall*
36 French House*
37 Frost House*
38 Fuess House*
39 G.E. Abbot Gymnasium
40 George Washington Hall
41 Graham House (Psychology)
42 Graves Hall (Music)
43 Hardy House (Admissions Office)
44 Isham Infirmary
45 Johnson Hall*
46 Junior House*
47 Memorial Bell Tower
48 Morse Hall (Mathematics)
49 Morton House* (Alumnae)
50 Nathan Hale House*
51 Newman House*
52 Newton-Hinman House*
53 Nineteen Twenty-four House
54 Oliver Wendell Holmes Library
55 Park House*
56 Paul Revere Hall*
57 Peabody House
58 Pearson Hall (Classics)
59 Pease House*
60 Pemberton Cottage*
61 Phelps House*
62 Power Plant
63 R.S. Peabody Foundation and Archaeological Museum
64 Rockwell Hall*
65 Samaritan House*
66 Samuel Phillips Hall
67 Smith House*
68 Stearns House*
69 Stevens House*
70 Stimson House*
71 Stott Cottage
72 Stowe House*
73 Stuart House
74 Sumner Smith Hockey Rink
75 Taylor Hall*
76 Thompson House*
77 Tucker House*
78 Williams Hall*

*Dormitory



TRAVELING TO ANDOVER

If traveling by car from Boston, take Route 93 north for about 19 miles. Take Exit 15, then turn right (east) on Route 125 for 2 miles. Turn right onto Route 28 and go north about 4 miles to the Andover campus.

If driving from Logan Airport, follow the signs to Boston via the Sumner Tunnel and follow Route 93 north signs.

From Route 495 north or south take Exit 29 "Andover" and proceed south on Route 28 through the town of Andover. The Phillips Academy campus is approximately one mile south of the Andover center.

The Trombly Motor Coach Service runs buses to Andover from the Continental Trailways Bus Terminal, 10 Park Square, Boston. At the time this catalog went to press, buses ran approximately every hour, 7:30 a.m.-11:00 p.m., Monday through Saturday, and from 10:30 a.m. to 11:00 p.m. on Sunday. Visitors should call the bus terminal in Boston, 482-6620, for up-to-date information.

Inns and Motels in the Area

Andover Inn
Chapel Avenue, Andover
Telephone 617-475-5903

Sheraton Rolling Green Motor Inn
Lowell Street, Andover
Telephone 617-475-5400

Merrimack Valley Motor Inn
Route 125, Chickering Road
North Andover
Telephone 617-688-1851

INDEX

Academic Calendar 1977–78, 2
Academic Advising 27
Academic Departments 27
Activities 20
Administration and Faculty 64
Admissions 50; Financial aid and Expenses 49;
 Application deadline 51; Interview schedule 52
Advisors, academic 27
Alumni Admissions Representatives 52
American History 33
Andover Life 12
Applications for Admission 51; for financial aid 49
Archaeology, study 37; Museum, The Peabody
 Foundation for Archaeology 24
Art 28
Art Gallery, The Addison Gallery of American Art 24
Art History 30 & 33
Astronomy 38
Athletics 46
Bills, payment of 49
Biology 37
Buildings, Map of 76
Calendar for Academic Year 1977–78, 2
Campus, Map of 76
Chemistry 38
Classics 31
Clubs and Activities 20 & 21
Clusters 16
College Admissions 74
College Matriculations, Class of 1976, 75
Complementary Programs 41
Complementary Schools Project 41
Contents, Table of 5
Counseling and discipline 18
Course of Study 27
Curriculum 27
Daily Schedule 14
Dining facilities 14
Disciplinary system 18
Dormitory accommodations 16; Map of 76
Drama 28
Early decision 52
Ecology (see Biology)
Emeriti Faculty 71 & 72
English Department 31
Examinations for Admission 51
Examinations, Secondary School Admissions 51
Expenses 49
Faculty and administration 64
Fees and expenses 49
Financial Aid 49, application for 49; loans 49
Foreign Languages Department 35
French 35
Furnishings and Equipment 48
Geographical distribution 73
German 35
Grants, Financial aid 49
Greek 31
Health Care 47
Health Insurance 49
History and Social Science 33
History of Phillips Academy 7 & 11
Independent work and off-campus projects 27 & 42
Insurance, health 49
Internship, Washington, D.C. 33 & 43
Introduction to Andover 7
Isham Infirmary 47
Italian 36
Language, Modern Foreign 35; Classical 31
Latin 31
Library, Oliver Wendell Holmes 23
Literature 31
Loans 49
Map of the School 76; directions to the school 78
Mathematics 34
Medical care 47
Modern Foreign Languages 35
Music, Department 29, private instruction 29
Office of, Admissions 50 & 64; Headmaster 64; of the
 Dean of the Academy 64; Deans of the Residential
 Clusters 64
Performing Arts 28
Philosophy 37
Photography 28
Physical Education 45
Physical Plant, Map of 76
Physics 38
Publications, student 20
Psychology 39
Religion and Philosophy 37
Religious Services, Programs and Activities 20
Residential Life 15 & 16
Russian 36
Scholarships 49
School Year Abroad 42
Science Department 37
Search and Rescue 46
Secondary School Admissions Test 51
Senior Class Admissions Candidates 51
Short Term Institutes 41

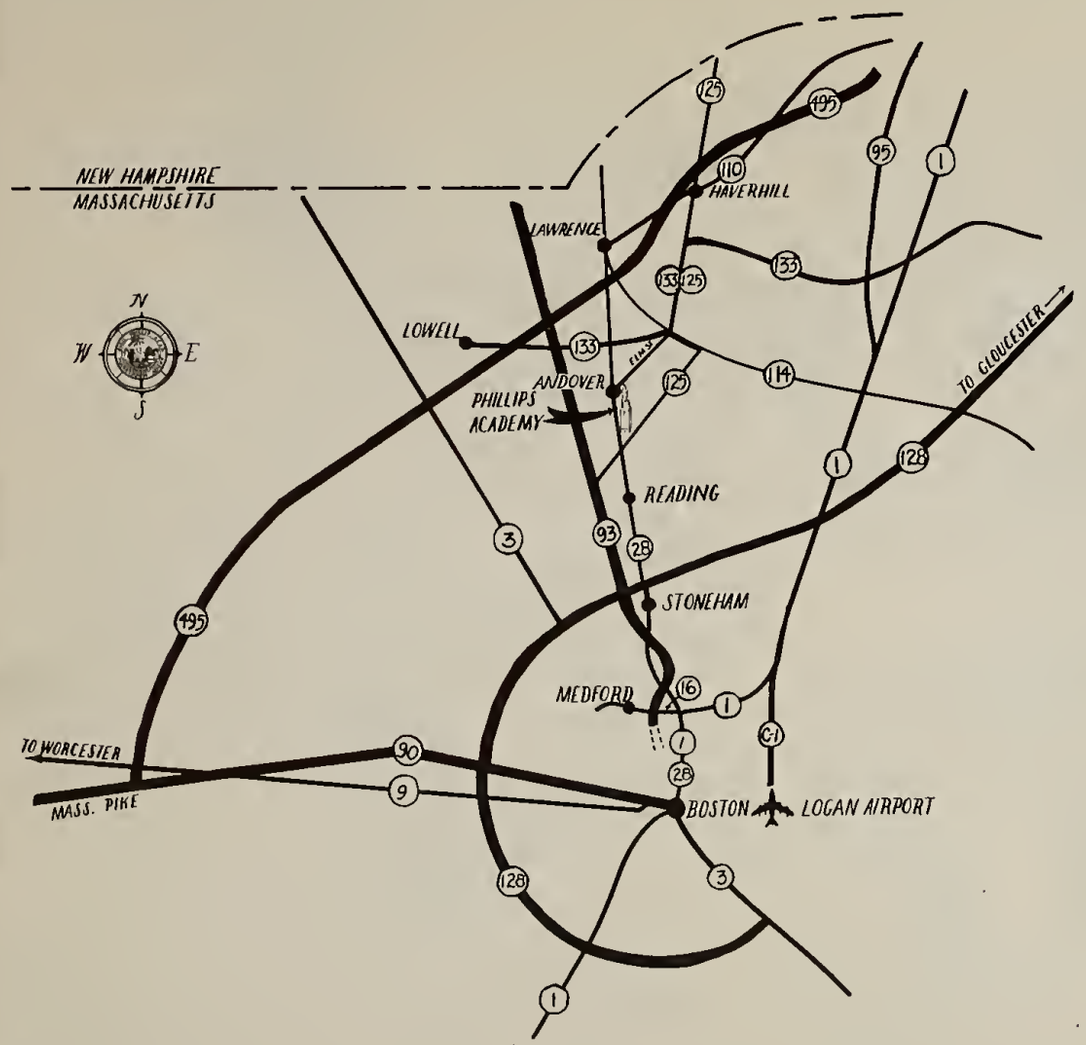
INDEX (Cont.)

Social Science 33
Spanish 36
Statistical Information 73
Student Life 14
Student Publications 20
Summer Session 41
Table of Contents 5
Theatre 28
Trustees 63
Tuition 48; payment schedule 48
Visual Arts 28
Visual Studies 28
Washington Intern Program 43
Work Program 16

Printed by Capital City Press
Designed by Ann M. Parks
Photography by Gordon Bensley '43
Richard D. Graber
Andrew D. Piper '72
John M. Snyder



PLEASE SEE REVERSE SIDE



APPROACHES TO PHILLIPS ACADEMY

ANDOVER, MASS.

FROM BOSTON: 23 MILES
RTES. 1-28 FROM MUSEUM OF SCIENCE
LEFT ON RTE. 16 IN MEDFORD
RT. ON INTERSTATE 93 NORTH
RT. ON RTE. 125
THEN NORTH ON RTE. 28

FROM LOGAN AIRPORT: 25 MILES
RT. ON RTE. C-1 BECOMES RTE. 1
WEST ON RTE. 114
LEFT ON ELM ST. AT MERRIMACK COLLEGE
LEFT ON MAIN ST. (RTE 28), ANDOVER

FROM POINTS WEST, NORTHWEST, AND S.W.
RTE. 495 NORTH
RT. ON RTE. 28

FROM POINTS NORTHEAST
RTE. 495 SOUTH TO RTE. 28 —
OR RTE. 133 TO 125
RT. ON ELM ST.
LEFT ON MAIN ST. (RTE. 28), ANDOVER

STEPHEN M. SULLIVAN, P.A. '69

Please tear this preliminary application form along perforation and mail with application fee in envelope provided. For complete application procedure, see Admissions section of this catalog.

Preliminary Application

For entrance in September 19____

Will you apply for financial aid? _____

Class applied for:

- ☐ Junior (9th grade)
- ☐ Lower Middle (10th grade)
- ☐ Upper Middle (11th grade)
- ☐ Senior (12th grade)
- ☐ Postgraduate

The required non-refundable $15.00 application fee should accompany this form.

Make checks payable to the Trustees of Phillips Academy.

Phillips Academy
Andover, Massachusetts
01810

Candidate's name _____
first *middle* *last*

Date of birth _____ ☐ male ☐ female Nickname_____

Name of parent or guardian _____

Permanent address _____
street *city* *state* *zip*

Mailing address _____
street *city* *state* *zip*

Other address _____
street *city* *state* *zip*

Area Code _____ Telephone number _____

☐ Check if you have relatives now or previously at Andover.

Priority will be given to those candidates who complete the application procedure by February 1, and they may expect a decision from the Admissions Committee by March 10. The possibility of admission is somewhat lessened for all applicants who complete the process after February 1, and decisions for this group may not be rendered before May 1. It is also possible that 12th Grade and Postgraduate candidates will not be notified until late spring. A deposit of $100 is required to reserve a place at the time admission is offered to an applicant.

Signed _____
parent or guardian *date*

Phillips Academy, Andover, Massachusetts 01810 Tel. 617-475-3400



COURSE OF STUDY 77-78

PHILLIPS ACADEMY, ANDOVER

Course of Study
1977-1978

Phillips Academy
Andover, Massachusetts 01810

CONTENTS

3 General Description
12 Archaelogy
12 Art
17 Classics
17 Greek
18 Latin
19 Civilization & Etymology
20 English
25 History and the Social Sciences
33 Interdisciplinary
34 Mathematics
38 Modern Foreign Language Division
38 French
43 German
44 Italian
44 Russian
45 Spanish
47 Music
50 Performing Arts
50 Theatre
52 Dance
52 Physical Education
52 Psychology
53 Religion and Philosophy
56 Science Division
58 Biology
58 Chemistry
59 Physics
60 Special Science

Course of Study

The curriculum of Phillips Academy comprises a required core of studies believed to be fundamental to a liberal education and elective courses designed to fit the special needs and interests of the individual student. Placement in the year level of a subject may be independent of a student's grade in school; through advanced placement at entrance or accelerated courses, many students fulfill requirements ahead of the normal year, thereby gaining increased opportunity for college-level or other elective courses. Instruction is given in all subjects required for entrance to higher institutions, whether liberal arts or technical.

Classroom groups are small enough to permit individual attention, and students are placed in sections fitted to their skill level. Accelerated sequences and advanced courses offer particularly able and well-prepared students opportunity to progress at a rate commensurate with their ability and ambition. Most departments offer courses beyond the level of preparation for college.

For full membership in a given class, students should have credit for the work of the lower classes or its equivalent. However, students are rated as members of a given class if their deficiencies for full membership in it do not exceed a certain number of trimester courses.

Every student is assigned to an Academic Advisor, who helps in the selection of courses that will meet Andover's diploma requirements, college entrance requirements, and the student's particular interests. Students should familiarize themselves with the Academy's basic requirements as well as with the possibilities of its flexible academic program. Actual course registration is done at Arena Day, prior to the start of each trimester.

Members of the Upper Middle and Senior classes should take care to familiarize themselves with the entrance requirements of the colleges they may wish to enter

The Trimester Plan

The academic year is separated into three trimesters. There are two types of weekly class schedules: one during which classes meet only Monday through Friday, and the other during which classes also meet on Saturday morning. There are roughly equal numbers of these five and six-day weeks within a given trimester. Another aspect of the varied curriculum and schedule is that some courses are regularly scheduled to meet four times per week, while others (especially beginning languages and mathematics) meet five. All departments offer year-long courses as well as those which are term-contained (completed in one trimester). The diploma requirements are stated in terms of full-year courses or trimester courses, depending on the academic area involved.

Special Courses in Foreign Languages
Special courses covering the work of two years in one are open to qualified Seniors in French, German, Greek, Italian, Latin, Russian, and Spanish. These *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and therefore are not recommended for students of limited language ability. Entering Seniors with no previous foreign language experience must pass a *10-20* course as a diploma requirement.

Accelerated Sequences and Advanced Placement
The Andover curriculum offers accelerated sequences in most departments. It provides special programs in Latin, Greek, and the modern foreign languages, designed to cover four years' work in three — or five years' work in four. The programs are open, on invitation of the departments, to especially able and ambitious students.

A large number of Andover students take College Board Advanced Placement Tests in May to establish advanced placement in College courses or credit toward the college degree.

Advanced Placement Examinations are offered in: American History, Art History, Biology, Chemistry, English, European History, French, German, Latin, Mathematics, Music, Physics, Spanish, and Studio Art (portfolio).

Independent Projects
With the approval of the Dean of the Academy and in accordance with requirements established by the Faculty, a student may substitute independent work for some portion of the normal course load. An independent project may replace a given course for up to three trimesters of a student's stay at the Academy, or may replace all courses during a given trimester. In either case, the work is done under the supervision of a member of the Faculty.

Off-Campus Programs and Projects
Off-Campus Programs are becoming increasingly important as schools recognize that many students wish to gain a practical understanding of the problems of contemporary life and to contribute as much as they are able to their solutions. Andover believes that well-conceived programs can demonstrate the need for knowledge and skills and stimulate the desire to learn. Where possible, it attempts to relate practical experience to the concerns of the classroom.

The *Community Service Program*, carried on in the nearby cities and towns of the Lowell-Greater Lawrence area, has in recent years involved well over one hundred students from Phillips Academy in voluntary, freetime work in hospitals, schools, and youth guidance and recreation centers.

The school also offers several off-campus residential programs. The *Washington Intern Program*, in which Andover joins with Exeter, allows a group of Upper Middlers to spend the Spring Term living together in Washington and working in the offices of U.S. Senators and Congressmen. Drawing upon several years' experience with a summer residential work-study program in Boston's South End, the school now sends students of the *Man and*

Society course to Winter Term work-study programs in Boston. (See *Social Science 401.*) In addition to school-sponsored group programs, the trimester plan provides an opportunity for individual Seniors to arrange off-campus projects related to their special interests. Some Seniors have worked as interns with officials in local government and members of the Massachusetts legislature. Others have carried out projects in the arts under the supervision of professionals outside the faculty. Development of such projects depends upon individual initiative in the investigation of opportunities and careful planning of a course of study that will meet diploma requirements yet free a block of time during the appropriate term.

School Year Abroad
Students may elect to spend their Upper Middle or Senior Year studying in France or Spain with *School Year Abroad*, originated as an off-campus program by Andover, later joined as a sponsor by Exeter and St. Paul's. Students live with host families while pursuing a course of study under the supervision of teachers from the three original sponsoring schools. Although *School Year Abroad* is now an independent program, it provides students with courses that earn full academic credit at Andover as well as the experience of immersion in a foreign culture. Students wishing to participate should consult their Academic Advisor and the *School Year Abroad* office (located in Samuel Phillips Hall on the Phillips Academy campus) for guidance in the selection of courses for the years prior to and following the year abroad.

Summer Session
The *Andover Summer Session* is a six-week academic enrichment program for boys and girls of high school age. Students who wish to receive Phillips Academy credit for courses taken at the *Andover Summer Session* must receive prior approval from the chairman of the department involved.

Short Term Institutes
The *Andover Short Term Institutes* provide an opportunity for students and teachers from secondary day schools to study one subject intensively during several weeks at Andover. Diploma candidates at Phillips Academy may apply for *Short Term Institutes*, provided that they are able to make individual arrangements for credit through the Dean of the Academy.

Complementary Schools Project
The *Complementary Schools Project* sponsors a wide variety of off-campus community internships available to Phillips Academy students in good standing. Students who wish to participate in a community internship through another school should apply to the Director of the CSP, after having secured credit arrangements with the Dean of the Academy and approval from parents, Cluster Dean, and House Counselor.

Planning a Program of Studies at Andover

The following is designed to help Andover students and their parents to understand both the theory and the practice of the Andover curriculum, and in particular to show the major decisions, and their consequences, which face the students and their Academic Advisors at each stage of the four-year program.

Workload

All new students are advised to carry only a normal program of five courses each term in the Junior, Lower Middle, and Upper Middle years. The requirement for the Senior year is four courses or the equivalent of the fourth course — that is, independent work equivalent to a course. Upper Middlers and Seniors may elect to adjust their workload by carrying four courses or five courses in any trimester during their last two years as long as the total for the two years comes to twenty-seven trimester units.

Academic Advising

Each student has an Academic Advisor, this member of the Faculty is responsible for counseling the student in the planning of his or her course of study at Andover. The Advisor meets with the student during the Orientation period prior to the opening of school in September to review the course selections which the student has made during the previous Summer or Spring. The Advisor must approve the selections for the Fall Trimester at this time, and those for the Winter and Spring Trimesters, respectively, during conferences held later in the year.

Within the diploma requirements, programs of study are determined by the student's long-range needs and aspirations — insofar as these can be identified. These needs may include college and career plans, strengths and weaknesses as revealed by previous performance and aptitude tests, and character and personal development.

In addition to the Academic Advisor, the House Counselor or Day Student Counselor must also approve the student's course selection for each trimester. From time to time during the academic year, the Counselor will report to parents concerning the student's growth and progress. Late each spring students in the three lower classes and their respective Academic Advisors will prepare a selection of courses for the coming year; a copy of this selection will be mailed to parents in June.

Although the student is ultimately responsible for the selection of his courses, the Academic Advisor will welcome any information and suggestions that parents may wish to offer.

Arena Day

Students register for their courses and sections in an arena setting before each term. Following meetings with their Academic Advisors, each student makes certain that the desired courses have sections scheduled that permit a conflict-free, workable daily program. Entrance into the arena is by classes and in numerical order according to a randomly chosen, pre-assigned number. Stu-

dents are advised to have alternate selections in mind in the event that some of the desired sections are full; enrollment is on a first-come, first-served basis.

Diploma Requirements

The basic diploma requirements are the satisfactory completion of a four-year secondary school program, of which at least three trimesters must be at Andover, and the student's being in good standing (not on Probation or under Suspension) at the time of graduation. A student who has been dismissed is ineligible for a diploma unless readmitted.

A student's program normally includes nine trimester units of a foreign language, eight of mathematics, a full-year course in United States History plus an additional trimester course in history taken at the Upper Middle or Senior level, a full-year course in a laboratory science, one trimester of art (usually *Visual Studies - Art 10*), one trimester of music (usually *The Nature of Music-Music 20*), and six trimesters of English, these to include a two-trimester course of competence in writing and reading and a four-trimester sequence of general literature. Certain diploma requirements vary with the class level at which the student enters Phillips Academy. Entering Juniors and Lower Middlers must take a trimester course in physical education in addition to required athletics. Entering Upper Middlers need take only one trimester of either studio art or music at the Academy. Entering Seniors are not required to take either art or music. Some modifications of the language requirement are made for entering Upper Middlers and Seniors. Entering Seniors with no previous foreign language experience must pass a *10-20* course in a foreign language. A Senior must pass a minimum of twelve graded trimester courses during the Senior year. Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses.

Credits (trimester units) required for diploma are:

For Entering Juniors	*54*
For Entering Lowers	*51*
For Entering Uppers	*48*
For Entering Seniors	*48*

Newly Admitted Students

Students entering for their first year are sent placement material, including some forms for present teachers to complete and a self-administered diagnostic test in elementary algebra. These items are used by the Academy to aid in proper placement or recommendation of course levels. New students are also asked to complete to the best of their ability a Program of Studies form, indicating the courses that they wish to take during the coming year. Although the placement material may alter somewhat a student's preliminary selections, it is helpful, for planning purposes, to know the levels that each student thinks he is ready to enter.

The Main Choices at Each Stage of a Four-Year Program

While a student's program of studies is adapted each year to his changing situation, *the future consequences* of each course should be noted, for certain

choices in one year open the way to later options and may close the door to others.

JUNIOR YEAR

Each trimester a Junior must take five courses, only one of which may be a Pass/Fail course. Students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring.

Most Juniors elect *English 10* or *Perception and Expression (English 11)* as one of their courses. (*English 11* must be taken in conjunction with *Art 10.*) In selecting courses, students are reminded to check the diploma requirements. A Junior's program should resemble the following outline:

1. Math — begin sequence (usually *Mathematics 10*);
2. Foreign Language — begin sequence (usually a year-long course at the *10*-level);
3. Elective
4. Elective
5. Elective

[Art, English, Social Science, History, another Math, another Language, Music, Performing Arts, Physical Education, Psychology, Science.]

LOWER MIDDLE YEAR

Each trimester a Lower Middler must take five courses, only one of which may be a Pass/Fail course. New students may have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. A few students take the CEEB Achievement Tests during their Lower Middle Year. In selecting courses, students are reminded to check the diploma requirements. A Lower's program should resemble the following outline.

New Students

1. Math — (usually *Mathematics 19* or *Mathematics 20*);
2. Foreign Language — enter the sequence by placement of the department;
3. English — begin sequence (usually *Comp. (T2), Lit A*);
4. Elective
5. Elective

[Art, Classics, Social Science, History, another Math, another Language, Music, Performing Arts, Physical Education, Psychology, Religion, Science]

Returning Students

1. Math — continue the sequence (usually *Mathematics 20 (T2), 32*);
2. Foreign Language — continue the sequence;
3. English — begin sequence (usually *Comp. (T2), Lit A*);
4. Elective
5. Elective

[Art, Classics, Social Science, History, another Math, another Language, Music, Performing Arts, Psychology, Religion, Science.]

N.B.

Students wishing to take *Social Science 401 (Man and Society; Urban Studies)* or to participate in the *Washington Intern Program* should make sure that they will have no year-long courses during their Upper Middle Year. Students wishing to participate in the *School Year Abroad Program* during their Upper Middle Year should discuss these plans with their Academic Advisor and seek guidance for the selection of courses for the Lower Middle Year.

UPPER MIDDLE YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 units in blocks of four or five courses per trimester. A Pass/Fail course may be elected as a fifth course only.

New students my have their placement adjusted as a result of the placement exam or questionnaire sent to them in the Spring. Many students take the CEEB Preliminary Scholastic Aptitude Tests in the Fall, all take the CEEB Scholastic Aptitude tests in the Winter, and many take the CEEB Achievement Tests in the Spring of their Upper Middle Year. Some also take the CEEB Advanced Placement Tests in the Spring of their Upper Middle Year. As a matter of general policy Academic Advisors encourage "depth" in the selection of courses for the Upper Middle Year. Most students satisfy their United States History requirement during their Upper Middle Year. In selecting courses students are reminded to check the diploma requirements. An Upper's program should resemble the following outline:

New Students

1. Math — (usually *Mathematics 30* or *31*);
2. Foreign Language — enter the sequence by placement of the department;
3. English — begin sequence (usually *Comp. (T2), Lit A*);
4. Elective
5. Elective

[Archaeology, Art, Classics, another English, Social Science, History, another Math, another Language, Music, Performing Arts, Psychology, Religion and Philosophy, Science]

Returning Students

1. Math — continue the sequence (usually *Mathematics 35 (T2)*);
2. Foreign Language — continue the sequence;
3. English — continue the sequence (usually *Lit B (T2), Lit C*);
4. History — usually *History 35 - The United States*;
5. Elective

[Archaeology, Art, Classics, another English, Social Science, History, another Math, another Language, Music, Performing Arts, Psychology, Religion and Philosophy, Science.]

N.B.

Students wishing to take an *Off-Campus Independent Project* for a trimester of their Senior Year must have no year-long courses during their Senior Year.

SENIOR YEAR

During the Upper Middle Year and the Senior Year, a student must accumulate a total of 27 trimester units in blocks of four or five courses per trimester. A Pass/Fail course may be elected only as a fifth course; however, an Independent Project, though marked on a pass/fail basis, is counted as a graded course for purposes of the above requirement.

A Senior must pass a minimum of twelve graded trimester courses during

the Senior Year. Seniors must pass all courses taken during their Spring Trimester. Independent Projects are counted as graded courses. Many Seniors retake the CEEB Scholastic Aptitude Tests in December and the CEEB Achievement Tests in January, and the CEEB Advanced Placement Tests in May. In selecting courses students are reminded to check the diploma requirements. A Senior's program should resemble the following outline:

New Students

1. Math — enter the sequence by placement of the department, if the requirement is not yet satisfied (usually *Mathematics 40*);
2. Foreign Language — enter the sequence by placement of the department if the requirement is not yet satisfied;
3. English — begin sequence (*Comp. (T2), Lit A*);
4. Elective
5. Elective

[Archaeology, Art, Classics, another English, Social Science, History, another Math, another Language, a *10-20* Language, Music, Performing Arts, Psychology, Religion and Philosophy, Science.]

Returning Students

Usually most diploma requirements are satisfied. Careful selection of electives for continued depth in the student's chosen areas is encouraged.

Transferring and Dropping Courses

To transfer or drop a course, a student must obtain an official transfer slip from his or her Academic Advisor. This slip is then taken as soon as possible to the Scheduling Officer in George Washington Hall. Transfers into term-contained courses must take place during the first six calendar class days of the term. No course may be dropped during the last two weeks of class meetings of the course. Students wishing to drop year-long or T2 courses prior to the normal end of the course may do so only by gaining the approval of a group of five, consisting of: the Department Chairman, the Dean of the Academy, the student's House Counselor, Academic Advisor, and Instructor who act as a review board. Credit is granted at the discretion of the Department Chairman and only if the student is passing the course at the time it is dropped and only for that portion completed. Year-long and T2 courses are considered as long-term commitments.

Attendance

Students are expected to attend **all** academic classes.

Instructors, if approached in advance, are permitted (but not required) to excuse students from a class meeting if the absence from that meeting will not add to weekend time. Only Cluster Deans may give permission to extend weekend time, and they may do so without consulting Instructors.

Failed Courses

In most cases, continuing students may attempt to receive credit for a failed course by taking a make-up examination. Spring Term Senior Failures may be made up only following Commencement.

College Entrance Examination Board Test Dates

Tests will be held on campus in 1977-78 as follows:

October 22	PSAT/NMSQT *(Preliminary Scholastic Aptitude Test/ National Merit Scholarship Qualifying Test)*
November 5	SAT/ACH *(Scholastic Aptitude Test/Achievement Tests)*
December 3	SAT/ACH
January 28	SAT/ACH
May 6	SAT/ACH
May 15-19	AP *(Advanced Placement Tests)*

Key to Course Designation

A course number ending in "0" denotes a year-long course (Example: *Math 10-0*). A number ending "123" indicates that the course is term contained, but sequential, and may be taken for one, two, or three terms (Example: *Art 21-123*). A number ending in a single digit "1," "2," or "3" indicates a course that is term contained, but one that may be taken only once (Example: *History 60-1*). The designations 1, 2, and 3 indicate the trimesters during which the course is offered: 1 = Fall; 2 = Winter; 3 = Spring. Some courses require a two-term commitment; they are indicated by a "(T2)" following the course name (Example: *Physics 52-12 Advanced Physics (T2)*). Check carefully each course description for any other limitations: Prerequisites, permission of instructor or department chairman required, etc.

Immediately below each course number is a 4-digit number in parentheses. This identification number (often referred to as the "computer number") is used for data processing files and is required when a student registers for courses. The final digit of the computer number has roughly the same meaning as the last digit of the course number:

Final Digit:	*Indicates:*
0	Year-long course
1	Course offered in Fall Trimester
2	Course offered in Winter Trimester
3	Course offered in Spring Trimester
4	T2 course offered in Fall and Winter
5	T2 course offered in Winter and Spring

Course Descriptions

Archaeology

The staff of the Robert S. Peabody Foundation for Archaeology offers a term-contained course as an elective

25—1 **Archaeology**
(2251) Four prepared classes. Open to Upper Middlers and Seniors. Limit 20 students. The course explores the methods archaeologists use to reconstruct prehistoric societies and to test general statements concerning how and why these societies came to be the way they were. In doing this, several major transformations in human society are considered, beginning with the society of the earliest men, and ending with the first civilizations. Emphasis is placed on two areas of the world where several of these changes are well documented: Mesopotamia and Mesoamerica. Lecture and class discussion are supplemented by visual aids and work with archaeological specimens. A brief excavation may be conducted locally.

Art

The diploma requirement in Art is as follows: entering Juniors and Lowers must take a trimester course in a Studio Art; an entering Upper must take a trimester course in a Studio Art or Music at the Academy; neither a Pass/Fail course nor an Art History Course is accepted as fulfilling the requirement. The basic course, *Visual Studies*, covers a broad range of material, is open to students of all abilities and experience, and is a prerequisite to almost all elective courses in Art. Exemption from this prerequisite is granted only on the basis of a portfolio of work judged satisfactory by the Chairman of the Department in collaboration with the teacher of the course which the student desires to enter. An acceptable portfolio should contain examples of two-dimensional work, three-dimensional work (slides or photographs are acceptable), and photography.

The College Entrance Examination Board offers students the opportunity to gain Advanced Placement in many colleges and Art Schools, thus enabling a student to by-pass basic design courses. Students must submit a portfolio of slides and original work to Princeton in May. *Visual Studies* in combination with two other trimester courses is adequate preparation for this opportunity. Those interested in Advanced Placement should consult with the Chairman early in the Upper Middle or Senior Year about choice of courses and preparation of the portfolio.

Students should expect to help pay for some art materials.

ntroductory Studio Courses

10—1 (0101) **10—2** (0102) **10—3** (0103) **Visual Studies**
Five class periods and three hours preparation. In its emphasis on observation, interpretation, and organization, the basic course is designed to supply an understanding of contemporary surroundings. Along with discussion of design problems, the student receives experience in photography, drawing, two-dimensional design, and three-dimensional construction. Previous experience in art is not required.

11—123 (0111) (0112) (0113) **Introductory Ceramics**
Pass/Fail. Four classes per week plus an evening studio. Limit of ten students. Basic techniques of hand-building, wheel-throwing, and glazing. Emphasis on the sculptural as well as the functional possibilities of clay. At least one raku firing each term, or a similar special project.

12—1 (0121) **12—2** (0122) **12—3** (0123) **Introductory Photography**
Prerequisite: *Visual Studies (Art 10).* The course covers fundamentals of black and white photography. Technique and control are emphasized for clarity, but content is the first consideration along with the development of a personal direction in the medium. This course is a prerequisite for all other still photography courses. Students are expected to provide their own cameras.

13—1 (0131) **13—2** (0132) **13—3** (0133) **Art Studio**
Pass/Fail. A Studio open to all classes which strives for flexibility to suit the varied art interests of the students. There is either an introduction for some people to drawing, painting, and printing, or an opportunity for those more experienced to develop the abilities and ideas they already have achieved. There is a balance between structured classes and free creative periods. *Visual Studies (Art 10)* is preferred but not required. Limit of 12.

ntermediate Studio Courses

Unless otherwise noted, the intermediate courses consist of four prepared classes each week. *Visual Studies (Art 10)* is a prerequisite for all intermediate courses.

20—123 (0201) (0202) (0203) **Drawing**
Prerequisite: *Visual Studies (Art 10).* A course designed to develop observation and drawing skills in several media, based on the assumption that drawing is an end in itself as well as a skill basic to other media.

21—123 (0211) (0212) (0213) **Animation**
Prerequisite: *Visual Studies (Art 10).* An introduction to the art of illusion of motion through shooting still images frame by frame with 16mm sound motion picture film, with emphasis on the relationship to the sound track in structuring the finished product. Given in collaboration with the Music Department, the course may interest either the art student who wishes to explore the visual possibilities of the medium or the music student who wishes to find a vehicle for an original composition.

23—123 (0231) (0232) (0233) **Two-Dimensional Design**
Prerequisite: *Visual Studies (Art 10).* The course deals with one's ability to manipulate those elements most associated with the picture plane: color, line, shape, texture, and composition of flat materials. Work includes: 1) color — free studies and collages dealing with the structural and expressive nature of color; 2) drawing — exercises using pencil, pen, and brush, figure and landscape drawing; and 3) figure-ground — expanding the structural and illusionary aspects of figure-ground as an end in itself and as a basis for graphic and advertising design.

24—123 **Three-Dimensional Design**
(0241) Prerequisite: *Visual Studies (Art 10).* Woodworking, welding, furniture design, toy-making,
(0242) sculpture — all these activities share principles of design which can be more broadly
(0243) applied to architecture, city and regional planning. The course introduces the wood and metal shops via a series of assigned projects, each of which demonstrates a basic set of design principles.

25—123 **Intermediate Ceramics**
(0251) Prerequisite: *Visual Studies (Art 10). Introductory Ceramics (Art 11)* preferred but not re-
(0252) quired. The course stresses combining techniques and the development of basic skills
(0253) toward new forms. Participation in glaze preparation and firings.

26—123 **Intermediate Photography**
(0261) Prerequisite: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Two class hours
(0262) plus four hours of laboratory work per week, offering students the chance to pursue a
(0263) project of their own choice. The course should be taken with an instructor different from the one the student studied with in *Introductory Photography (Art 12).*

Advanced Studio Courses

Visual Studies (Art 10) is a prerequisite for all advanced courses.

300—123 **Graphics and Photography**
(0701) Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Applying
(0702) photography to graphic arts, particularly through photo-silkscreen. Individual experimenta-
(0703) tion is emphasized in an attempt to carry the expressive force of photography beyond darkroom techniques.

301—123 **Studio Photography**
(0711) Prerequisites: *Visual Studies (Art 10)* and *Introductory Photography (Art 12).* Limited to ten
(0712) students. Portraiture and Fashion: controlled lighting with photo flood and studio strobes.
(0713) Large format cameras (2¼ and 4x5) are supplied for this course. Meets Wednesdays from 1:30 to 5:30 for shootings; subjects may be professional models from Boston or subjects of the student's choice.

302—123 **Painting**
(0721) An introduction to the basic elements and techniques of paintings in oils and acrylics.
(0722) Specific problems are assigned to study the fundamentals of color, form, composition
(0723) and space in painting, as well as to encourage the student's individual expression. Class critiques and discussions, slides, reproductions, films and occasional field trips are also part of the course. Previous experience is helpful but not necessary; students are encouraged to sign up for the full year if possible.

303—23 **Filmmaking**
(0732) Prerequisite: *Visual Studies (Art 10).* This course combines viewing theatrical, docu-
(0733) mentary, and art films for discussion and criticism with the production of individual or group student films in silent super-8. Course work will include developing film ideas, script-writing, shooting, cutting, editing, and class critiques. Editing and projection experiment will be provided. A small number of cameras are available for day-loan, but students are encouraged to acquire their own cameras for greater control and freedom.

304—123 **Advanced Ceramics**
(0741) Prerequisite: *Visual Studies (Art 10).* For those who are seriously interested in the total
(0742) operation from design to execution. Hand-building, wheel-throwing, glazemaking (and
(0743) some chemical analysis), responsibility for loading and firing electric, gas, raku, and salt kilns. Assigned reading and occasional field trips.

305—123 **Print Shop**
(0751) Prerequisite: *Visual Studies (Art 10).* Relief Painting: designing, cutting, and printing
(0752) linoleum and woodblocks in editions. Silkscreen: making stencils for the screen, ecperi-
(0753) menting with color, and printing imaginative compositions as well as message-oriented posters. Intaglio: starting with drypoint and learning the processes of etching and printing in a workshop atmosphere.

306—0 **Advanced Photography**
(0760) Prerequisite: *Visual Studies (Art 10)* and *Introductory Photography (Art 12)*. Students must
306—12 enroll for the Fall Term and at least one other term. Full-year participation is encouraged.
(0761) This course is for students who would like to survey a wide variety of photographic
(0762) styles, i.e., natural landscape, social landscape, commercial photography, etc. Advanced
306—13 darkroom instruction helps students to better control negative developing and printing
(0761) technique. Individual projects are considered.
(0763)

308—123 **Sculpture**
(0781) Prerequisite: *Visual Studies (Art 10)*. Offers an opportunity to work in practically every
(0782) material available to the sculptor today, including wood, stone, metal, plastics, plaster,
(0783) and others. It is therefore possible for students to develop into sculpture concepts discovered in *Visual Studies (Art 10)* or *Three-Dimensional Design (Art 24)* as well as ideas drawn from their own experience. Some outstanding work of recent classes include the "avacado" by Seymour House '73, a thirty-foot welded construction which is now a permanent addition to the Addison Gallery, a standing steel figure by Jamie Morgan, '73, which was on display in the Headmaster's Office, and others. Individual criticism is stressed.

309—123 **Kinetics**
(0791) Prerequisite: *Visual Studies (Art 10)*. *Three-Dimensional Design (Art 24)* is recommended. A
(0792) search for the aesthetics of movement. Individual inventiveness is stressed as students
(0793) pursue projects directed toward devices that produce implied or real motion. Self-perpetuated problem-solving situations become one of the prime values and objectives of the course.

310—123 **Architecture**
(0801) Prerequisite: *Visual Studies (Art 10)*. For Uppers and Seniors. A design course based on
(0802) previous work in *Visual Studies (Art 10)* and/or *Three-Dimensional Design (Art 24)* which
(0803) relates the basic elements of surface and volume to the design of shelter, the efficient combination of human functions, and the organization of construction. At least one term involves large-scale projects constructed in the woodworking shop. Examples from recent years include the Search and Rescue climbing tower near Rabbit Pond and the playground at a local elementary school.

311—123 **Contemporary Communications**
(0811) Four prepared class periods. The course examines some of the bases of communication
(0812) between and among people. Material includes fiction, nonfiction, poetry, drama, motion
(0813) pictures, and the visual arts. Prerequisites: Successful completion of a course in art, music, or theatre. At least one term the course engages in a large group project aimed at public presentation. (Mr. Owen and Mr. Lloyd).

312—123 **Puppetry**
(0821) Prerequisite: *Visual Studies (Art 10)*. Four prepared class periods. The course aims to
(0822) expose students to various techniques of puppet construction which may then be tried
(0823) out regularly before audiences in the Drama Lab, the Andover Public Schools, and the main stage. Fall Term is devoted to types of shadow puppets (Greek, Javanese, etc.), Winter Term to hand puppets and/or marionettes. The Spring Term will be devoted to the production of "Fantoccini," a collection of puppet types in a variety show aimed at a performance for the Bicentennial Celebration.

313—0 **Phillips Academy Bicentennial Exhibition**
(0830) Prerequisite: *Visual Studies (Art 10)*. This course, given in conjunction with the production of two major exhibitions in the Addison Gallery of American Art, provides students with the opportunity to participate in the research, planning, design, and construction of these exhibitions. A full year's commitment, plus permission of the instructor, is required. The exhibitions, scheduled to open in June, 1978, are: 1) "Andover — Past," an excursion backward in time, which will provide viewers with a sense of the school's history through

reconstructed tableaux, actual documents, projected photographs, and other artifacts. To heighten drama, the production will be in the form of an environmental time-warp. 2) "Andover — Future" will be an imaginary projection of what the school may be like 200 years hence. Included will be models of the campus, descriptions of student life, and content of the curriculum.

314—3 (0843) **Calligraphy: The Art of Lettering by Hand**
Prerequisite: *Visual Studies (Art 10).* A course designed to develop basic techniques of fine hand lettering beginning with Roman capitals and tracing the historical developments of letter construction, integrating form and function. Practical applications can range from simple matter quotations to illuminated manuscript work.

History 54—1 (2541) **Art and Architecture in Antiquity and the Middle Ages**
Four prepared class periods. For Uppers and Seniors. This course is an introduction to Western art from Archaic Greece to fourteenth century Italy. Focusing primarily on architecture and sculpture, it covers major trends in Greek, Roman, Byzantine, Romanesque, and Gothic art. It stresses the basic vocabulary, fundamental questions, and analytical methods of the art historian. (Mr. Sewall)

History 55—2 (2552) **Art and Architecture in the Renaissance and Baroque**
Four prepared class periods. For Uppers and Seniors. It is strongly suggested that students planning to take *History 55* have completed *History 54*. This course covers European art from the Early Renaissance in Florence and Flanders to the Neoclassical movement of the late eighteenth century. (Mr. Sewall)

History 56—3 (2553) **Art and Architecture Since the French Revolution**
Four prepared class periods. For Uppers and Seniors. It is strongly suggested that students planning to take *History 56* have completed *History 55*. This course covers the diverse movements of "modern art" in the nineteenth and twentieth century. It includes occasional visits to museums in Boston and New York. (Mr. Sewall)

Art History 57—3 (2573) **American Art History, 1770-1950**
Prerequisite: *Visual Studies (Art 10).* Focusing on the works of art in the Addison Gallery of American Art, this survey of American Art examines paintings, prints, and drawings. Each week each student chooses one or two artists to study through examination of actual works of art and reading of primary and secondary source material. Artists included: Copley or West, Cole or Doughty, Homer or Eakins, Hassam or Twachtman, Davies or Prendergast, Sloan or Bacon, O'Keeffe or Hopper, Burchfield or Benton, and Pollock or Hofmann. Open to Uppers and Seniors. Four prepared hours per week.

History 54, History 55, and either History 56 or Art History 57 when taken consecutively combine to form a full year's preparation for the Advanced Placement Examination in Art History.

The Classics

The foreign language diploma requirement is competence at the level of the third year of a modern or ancient language. Such competence in Latin or Greek is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of the eighth, or even the seventh trimester, by passing a special examination set by the department

The Department of Classics offers students through the study of the Greek and Latin languages a direct entry into Greek literature, which is still unsurpassed in quality, and into Latin, which, as the universal language of church, court, and scholars throughout the formative years of modern Europe, can rightly be termed the mother tongue of Western Civilization, and the clue to its meaning.

Latin has traditionally been the first language of the two to be studied in school. Greek, as a first language, however, is no more difficult than Latin. The Greek alphabet is easily mastered in the first two class meetings and students quickly discover that the language has poetic and expressive quality and content which stimulate imagination and understanding of man's political and intellectual development.

Greek Courses

10—0 **Greek**
(5010) Five prepared class periods. The course prepares students for the reading of Greek literature. The necessary training is given in basic vocabulary, forms, and syntax. Frequent practice together in class with other students and the teacher in sight reading of characteristic passages of Greek literature provides an introduction into the bases of Greek civilization and culture. Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Crosby and Schaeffer's *Introduction to Greek* (Allyn and Bacon) are used.

10-20—0 **Greek**
(5020) Five prepared class periods. The course is open to Seniors and Upper Middlers. It covers in one year the essential material of *Greek 10* and *Greek 20*. The texts are Chase and Phillips' *A New Introduction to Greek* (Harvard University Press) and Xenophon's *Anabasis*, ed. Mather and Hewitt (University of Oklahoma Press).

13—1 **Introduction to Greek**
(5031)
13—3
(5033) Four prepared class periods. The course is for students whose curiosity for the Greek language and civilization has been aroused by their studies in Latin or the modern languages (including English). It provides an excellent introduction into the intricacies and subtleties of a highly inflected language. The student is treated to an inside preview of a body of literature which has been the groundwork for the Western World's literature of today. It is a term-contained course, but students wishing to continue with Greek will have the opportunity to do so.

20—0 **Greek**
(5040) Five prepared class periods. The second year is occupied with selections from Xenophon's works and with some of the philosophy of Plato. Prose composition in Attic Greek is studied, the grammar is reviewed, and there is work in sight translation. The texts are Xenophon's *Anabasis*, ed. Mather and Hewitt (University of Oklahoma Press) and selections from Plato's dialogues in *The Martyrdom of Socrates*, ed. Doherty (Oxford).

30—0 **Greek**
(5050) Four prepared class periods. Selected books of the *Iliad* and the *Odyssey* and a play of Euripides examine the nature of tragedy, heroism, and self-discovery. The texts are Benner's *Selections from Homer's Iliad* (Naiburg), Homer's *Odyssey I-XII*, ed. Standford (St Martin's Press), and Euripides' *Hecuba*, ed. Hadley (Cambridge).

40—123 Greek

(5061) Four prepared class periods. In the Fall Term ancient concepts of justice and morality are
(5062) examined through the works of Herodotus and Thucydides. Human tragedy is explored in
(5063) a play of Sophocles or Euripides in the Winter Term. The Spring Term is devoted to the study of emotion and self-expression in the Greek lyric poets. The texts are Chase and Phillips' *A New Greek Reader* (Harvard University Press), Euripides' *Medea*, ed. Elliott (Oxford), Sophocles' *Oedipus Tyrannus*, ed. Jebb (Cambridge), and Campbell's *Greek Lyric Poetry* (St. Martin's Press)

Latin Courses

10—0 Latin

(5110) Five prepared class periods. The purpose of the course is to prepare students for general reading in Latin. To that end, thorough training is given in the basic vocabulary, forms, and syntax of the language along with frequent practice in sight reading. The student is introduced to the general outline of Roman history and civilization and improves his English vocabulary through the study of Latin derivatives. The text is Chase's *A New Introduction to Latin*, (Independent School Press).

10-20—0 Latin

(5120) Five prepared class periods. For Upper Middlers and Seniors. A year-long accelerated introductory course covering two years in one. Those who pass the course successfully are given credit for two years of Latin. The course is reserved for students who give evidence of high ability. Texts are the same as those for *Latin 10* and *Latin 20*.

11—0 Latin

(5130) Five prepared class periods. The course begins Winter Term. Its content is the same as *Latin 10*, taught at a more gradual pace to allow time to resolve specific linguistic problems. Students who find unusual difficulty in mastering a modern foreign language are encouraged to discuss their eligibility for the course with their teacher, advisor, or with the Chairman of the Department of Classics. The text is Buehner and Ambrose's *Preparatory Latin*, (Independent School Press).

13—1 Introduction to Latin

(5141) Four prepared class periods. The course is for students seeking an introduction to the
13—2 Latin language, or those whose studies in other languages (including English) have
(5142) aroused their curiosity about grammar, syntax, and vocabulary. It offers special profit and fascination to students of French, Spanish, and Italian, since it illuminates much of what they already know by acquainting them with the mother language. For students who plan some day to study Russian or German it serves as an introduction to the workings of highly inflected languages. It is a term-contained course, but students wishing to continue with Latin will have the opportunity to do so.

20—0 Latin

(5150) Five prepared class periods. During the first term, the course gives a thorough review of the fundamentals of Latin grammar and begins the reading of Caesar. Caesar's account of his campaigns provides for the student insight into the problems of political ambition and international intrigue. These ideas are developed and compared in additional readings from Nepos and Livy. There is practice in sight translation and prose composition. The texts are Buehner's *An Intermediate Latin Reader* (Independent School Press) and Colby's *Review Latin Grammar* (Independent School Press).

21—0 Latin

(5160) Five prepared class periods. The course continues the work begun in *Latin 11*. It is open to students who have completed *Latin 11* and to students in their first year at Phillips Academy.

30—123 Latin

(5171) Four prepared class periods. Each term is the prerequisite for the term which follows it.
(5172) Through the writings of Cicero and a variety of other authors, the course teaches students
(5173) to read Latin prose with an increasing ease. It presents a picture of Cicero's life and times and compares the political unrest and maneuvering of his time with that of our own. The

literary importance of Cicero as the creator of a prose style which influenced the literature of Europe for centuries is assessed. In the Spring Term the student is introduced to Roman poetry through readings in Vergil's *Aeneid*. The student will begin to understand how Vergil, as heir to the Homeric tradition, gave to epic and to Western poetry in the generations that followed him its definitive form. The text is Gillingham and Barrett's *Latin: Our Living Heritage, Book III* (Charles E. Merrill Books).

31—0 **Latin**
(5180) Five prepared class periods. The course follows the same outline as *Latin 30*. It is open to students who have completed *Latin 21* and to students in their first year at Phillips Academy.

40—123 **Latin**
(5191) (5192) (5193) Four prepared class periods. Each term is the prerequisite for the term which follows it. By a study of selections from the *Aeneid* and other Latin poetry, the course introduces students to both the forms and content of classical poetry. Students become familiar with the symbolic character of the Western poetic tradition in Vergil, its source. This use of symbolism reflects the poet's unsurpassed treatment of the human condition and destiny. The text is *The Aeneid of Vergil*, ed. Knapp (Scott, Foresman and Company).

50—123 **Latin**
(5201) (5202) (5203) Four prepared class periods, one unprepared period devoted to sight work. The course includes preparation for the Latin Advanced Placement Examination. In the Fall Term, selections from Livy's *Histories* give students insight into the foundations of some of the Western's World's ideas of government and law. Selections from Tacitus' *Annals* are read as a contrast because of their studied depiction of human excess in tyranny and degradation. In the Winter Term, Roman comedy treats students to the bases of European high comedy and farce. In the Spring Term, the students begin to understand the Roman concepts of moderation versus excess through the writings of the poet Horace, described by a Twentieth Century psychiatrist as "a type of the perfectly integrated personality." The lyric poetry of Catullus reveals the perennial personal emotions found as well in the First Century BC as now.

Classics Courses

21—1 **Classical Civilization: Greece**
(5321) **21—3** (5323) Four prepared class periods. For Juniors and Lower Middlers. The course focuses on the height of ancient Greek civilization, the foundations of its culture, and its unique experience in political democracy. In dealing with this pinnacle of civilization, the course provides insight into the realities of political democracy today by suggesting how our society has arrived at the point it is at now and hinting at where we may be headed. The texts are Kitto's *The Greeks* (Penguin) and *The Portable Greek Reader*, ed. Auden (Viking).

22—2 **Classical Civilization: Rome**
(5332) **22—3** (5333) Four prepared class periods. For Juniors and Lower Middlers. The course introduces students to the civilization of Rome which dominated the Western World politically for a thousand years and culturally for even longer. The development of the concepts of politics, law, and empire as we know them today are discussed. The course challenges the student to consider the meaning of the Roman experience in the results of the "Roman Peace" as well as in its "Decline and Fall." The texts are Starr's *The Ancient Romans* (Oxford), Barrow's *The Romans* (Penguin), and *The Portable Roman Reader*, ed. Davenport (Viking).

30—123 **Epic Poetry**
(5341) (5342) (5343) Four prepared class periods. Each term is a prerequisite for the following term. This course focuses on Western epic poetry; the poems are delightful, unique literary monuments of great importance in the development of Western literature, and they are a fascinating means of learning about Indo-European culture, human psychology, and man's creative history. Fall Term deals primarily with cultural development and psychology, with a variety of readings, especially from Frazer's *Golden Bough*. Winter and Spring Terms are devoted to the epics themselves as literature and as evidence of the Fall

Term's material. *Gilgamesh*, the *Iliad* and *Odyssey*, the *Song of Roland*, *Beowulf* and Tolkien's *Lord of the Rings* are read, as well as excerpts from other European epics

31—1 **Etymology**
(5351) Four prepared class periods. For all classes. Training in the interpretation of English words
31—2 by systematic analysis of elements derived from Greek, Latin and other Indo-European
(5352) languages. Exercises expand vocabulary and develop precision of expression and
31—3 understanding
(5353)

English

The diploma requirements in English are to establish competence in writing and reading (normally by successful completion of the *Competence Course*), and to complete the *Literature Sequence* through *Literature* C. For those entering Seniors who must take the *Competence Course*, the requirement is reduced by the appropriate number of trimesters.

The English Department also offers courses at the following levels: *English 10* and *Perception and Expression (English 11)* for Juniors, *English as a Second Language (English 13)* for some foreign students, specialized courses for students who have already passed their competence and literature requirements and elect to continue studying English. Related courses, whose prerequisites vary, are listed elsewhere in this booklet: e.g., under Performing Arts, Interdisciplinary Courses, Classics Courses, and Modern Foreign Language Courses in translation. All English courses meet for four prepared classes a week, unless the course description states otherwise.

JUNIORS

Students entering the Junior Class are strongly urged to take the normal Junior course, *English 10* or *Perception and Expression (English 11)*, although they may elect to take no English at all.

LOWER MIDDLERS AND UPPER MIDDLERS

Entering Lower Middlers and Upper Middlers should take the *Competence Course*. They will be advanced to the *Literature Sequence* as soon as they establish competence.

SENIORS

Entering Seniors take the *Competence Course* in the Fall Term. If an entering Senior is deemed competent early in the Fall Term, he may apply to the Department Chairman for permission to waive the literature requirement and enroll in one of the specialized courses.

Introductory Courses

10—0 **English**
(1100) This course is the Department's standard course for Juniors. It is a year-long offering and must be taken for all three trimesters if the student wishes to earn credit for the course. Throughout the year there is emphasis on sentence structure, paragraphing, and articulate expression in speech and writing. The student learns to observe and to listen, to keep a

journal, and to read literature sensitively and intelligently. In the Fall Term each class studies myth, using Homer's *Odyssey*, in the Winter Term the focus is on literature of observation, like Twain's *Life on the Mississippi*, in the Spring Term at least one Shakespeare play is read.

11—0 **Perception and Expression**
(1110) This course, open only to Juniors, has four prepared periods. Taken in place of *English 10*, it seeks to involve the student in a number of experiences intended to increase awareness of the world around us. In addition to reading, writing, and listening, students work with tape recorder and video tape, still and motion camera, and acting, involving individual and group performances in various media. This course is taken concurrently with *Visual Studies (Art 10)*.

13—123 **English as a Second Language**
(1131) The course acquaints the foreign student with the idiom and structure of English. This
(1132) class is open to upperclassmen.
(1133)

14—123 **Basic Skills**
(1141) This course is for Lower Middlers, Upper Middlers, and Seniors who require a survey of
(1142) grammar, sentence structure, and other basic verbal skills before they take *Competence*.
(1143) The only students admitted to the course are those assigned to it by the Department.

16—23 **Language Skills (T2)** (a two-term commitment)
(1165) This course is designed for those students, primarily Juniors, who need supplementary help in overcoming weaknesses in reading, writing, spelling, and vocabulary. By studying the structure of words and sentences, and by practicing patterns of pronunciation, students can learn to understand language better and use it more effectively. Specific assignments are geared to the needs of each student. Open only to students who have permission of the Chairman of the English Department.
Juniors are also eligible to enroll in Etymology, which is described under Classics 11.

Normal Required Sequence (2 years)

	Fall	Winter	Spring
First year of sequence	Competence (T2)		Lit A
Second year	Lit B (T2)		Lit C

(1204) **Competence Course (T2)** (a two-term commitment)
The course is designed to teach the basic skills in reading and writing. It enables a student to achieve the competence requisite for the literature and the specialized courses. The course is concerned with the recognition and use of the basic elements of a sentence, sentence patterns, punctuation, paragraph development and coherence, and the composition of unified exposition. It encourages the acquisition of important reading skills in conjunction with the study of writing. Passages that have been composed by skillful writers are evaluated for their particular strengths: organization, logic, point of view, tone, diction, transitional devices. Through the use of the summary sentence, the outline, and the summary paragraph, a student learns to reduce a passage to core ideas.

Literature Sequence
The texts listed comprise about half the reading in each course, the remaining texts to be chosen by the individual instructor of each section.

Lit A

(1211) A one-term introductory course to the *B* and *C* courses in which the student reads in
(1212) depth poems and short stories of the Twentieth Century. Composition stresses the analysis
(1213) of these poems and stories.

Core Texts. *Pocket Book of Modern Verse*, ed. Oscar Williams
50 Great Short Stories, ed. Crane (Bantam)

Lit B (T2)

A choice among three courses in English and American literature 1660-1900. Each course is a two-term unit given in the Fall and Winter Trimesters.

(1224) **Lit B-I (T2)** (a two-term commitment)
(1225) The prose and poetry of the late Seventeenth and Eighteenth Centuries, with emphasis on satire.

Core Texts: *Fall Term*
Swift, *Gulliver's Travels*
Pope, selected poems
Winter Term
Fielding, *Joseph Andrews*
Blake, selected poems; or selections from *Eighteenth Century Minor Poets*

(1234) **Lit B-II (T2)** (a two-term commitment)
(1235) Romantic literature in England and the United States.

Core Texts: *Fall Term*
Keats
Bronte, *Wuthering Heights* or Shelley, *Frankenstein*
Winter Term
Whitman
Melville, *Moby Dick*; or Hawthorne's short stories

(1244) **Lit B-III (T2)** (a two-term commitment)
(1245) English and American literature of the later Nineteenth Century

Core Texts: *Fall Term*
Hardy, *Mayor of Casterbridge*; or Dickens, *Hard Times*
Browning
Winter Term
Twain, *Huckleberry Finn* or *Pudd'nhead Wilson*
Dickinson, *Final Harvest*

Lit C

A choice among three courses centering on three plays of Shakespeare and some related works. Each course is one trimester given in the Spring Term. Each section focuses on a theme chosen by the individual instructor

(1261) **Lit C-I:** *Macbeth*
(1263)

(1271) **Lit C-II:** *Hamlet*
(1273)

(1281) **Lit C-III:** *Othello*
(1283)

Elective Courses

Only courses with sufficient enrollment will be given.

18—1 **Efficient Reading**
(1181) Primarily for Upper Middlers and Seniors. A course for increasing reading speed and com-
18—2 prehension, using the *Harvard Reading Course* with supporting exercises in writing and
(1182) vocabulary.

Specialized Courses

Specialized Courses are open to students who have successfully completed *Literature A, B,* and C. Courses numbered in the *500's* are more intensive and demanding than those numbered in the *400's*. Each course has four prepared class periods a week, unless specifically stated otherwise.

400—1 **Irish Studies**
(1701) First a look at the history and folklore of Ireland and then an attempt to trace their influence on Irish writers from Yeats to Beckett. Representative authors: Yeats, Joyce, Synge, O'Casey, Beckett; *The Concise Course of Irish History*, Moody (Mrs. Bugbee)

401—23 **Philosophy and Literature**
(1712) As a bridge between *Lit* C and the *500* courses, this course extracts philosophical statements contained in literature, concentrating on the definitions of truth, beauty, and goodness. The readings contain statements from philosophers as well as poets and novelists
(1713) (Mrs. Bugbee)

402—123 **Great Writers Before 1850**
(1721) This course is intended primarily for students who have taken Lit B-III and want to in-
(1722) crease their knowledge of writers prior to 1850. Each term students study three writers
(1723) and do an individual project on a fourth. Students together with the instructor choose writers from the following: Homer, Sophocles, Chaucer, Shakespeare, Donne, Pope, Fielding, Keats, and Austen. (Mr. Edmonds)

403—12 **Introduction to Writing (T2)** (a two-term commitment)
(1734) An introductory course to the writing of original short stories, informal essays, and poetry. After examining examples of the genres mentioned, the student tries his hand at one or more of these forms. The second term, for which the first is a prerequisite, is devoted largely to reading works in progress. With written permission from the instructor, a student may take this course before he has completed the normal *Competence* and *Literature Sequence* requirements. (Mr. Owen)

404—3 **Hemingway: The Man and His Work**
(1743) A close reading of the shorter works and a final report on one of the novels by each student will be used to achieve some appreciation of Hemingway's technical skill, symbolism, and relentless ethics. (Mr. Sykes)

405—2 **Toward the Promised Land**
(1752) A consideration of several American authors' depiction of migration from the South to the North and the frustrations of the "dreams deferred" Works by Ellison, Baldwin, Wright, Hughes, McKay, and Toomer will be read. (Mr. Sykes)

500—12 **James Joyce**
(1801) The first term is devoted to *Dubliners, A Portrait of the Artist*, and *Stephen Hero*, and
(1802) Ellmann's *James Joyce*; the second to *Ulysses* and *Finnegans Wake* in part. The purpose of the course is to follow the development of Joyce's method and style and to develop the skill to read important and difficult works without the aid of study guides and other secondary material beyond the Ellmann. Although the course may be taken in either term, the student gains a better sense of Joyce's genius by enrolling for two terms. (Mr. Brown)

501—123 **Man and God**
(1811) The course considers man's search for meaning in what frequently seems to be an in-
(1812) explicable world. Readings include *The Oedipus Cycle*, Sophocles; *King Lear*, Shakespeare;
(1813) *Rosencrantz and Gildenstern Are Dead*, Stoppard, *Long Day's Journey into Night*, O'Neill; *J. B.*, MacLeish, *A Portrait of the Artist as a Young Man*, Joyce; *The Fixer*, Malamud; *The Idiot*, Dostoevski; *The Trial*, Kafka; *Tiny Alice*, Albee; *The Birthday Party*, Pinter; *The Sound and the Fury*, Faulkner; *Short Stories*, Salinger; *Rabbit Run*, Updike; *Wiseblood*, O'Connor. (Miss St. Pierre)

508—123 Modern Playwrights
(1821) (1822) (1823) The development of drama in Europe from Pirandello to Pinter (Fall), in America from O'Neill to Albee (Winter), and new work by living playwrights in Europe and America (Spring). Enrollment in the Fall or Winter Term is normally a prerequisite for enrollment in the Spring Term. (Mr Kirkland)

509—123 Shakespeare: The Man, The Times, The Theatre, The Plays
(1831) (1832) (1833) Each term a cycle of related plays is read, with biographical and historical material. During the course of the year, the class reads representative tragedies, histories, and comedies

511—123 Writers in Depth
(1841) (1842) (1843) By reading the major works of a significant writer as well as biographical and critical material, members of this seminar explore questions such as these: What themes recur in the writer's work? What style does the writer employ? How autobiographical are the writer's works? What judgements have the critics rendered? How valid are these criticisms? O'Neill, Yeats, Faulkner, Lawrence, and Fitzgerald are among those writers recently studied (Mr Price)

512—12 Satire and Comedy
(1851) (1852) A study of both the theories and practice of satire and comedy, with emphases on the eighteenth century and the modern period. Works by authors like Pope, Swift, Sterne, Ben Jonson, Waugh, and Heller will be studied in conjunction with the visual art of Hogarth and Steinberg, and recordings of modern performers like Cohen and Sahl. (Mr. Regan)

513—123 Novel and Drama Seminar
(1861) (1862) (1863) Most of the course is concerned with the major works of modern literature, principally the works of James, Faulkner, Grass, Barth, Nabokov, Borges, O'Neill, Eliot, Brecht, Kopit, Williams, Storey, and Pinter. Students have the opportunity to study the "world" of each writer and to compare it with that of the others. In order that they may have a basis of comparison with the writers of the past, they also study *The Brothers Karamazov* and *King Lear*. Class periods are devoted to seminar discussions, exercises in logic and argument, dramatic readings, drama games, and critiques of student analytical and creative work. (Mr Wise)

514—123 Creative Writing
(1871) (1872) (1873) The course combines creative writing with the study of literature in depth. The reading consists of novels, collections of short stories, collections of poems, usually chosen from great works of the 19th and 20th centuries. After the Fall Term, reading is chosen by the students in collaboration with the teacher. Class periods are devoted to workshops in which student writings are discussed and to seminar discussions of literary works. Normally the first term is devoted to fiction, the second to drama, the third to poetry, though fiction is stressed more than drama and categories tend to overlap. An individual may, if there is sufficient cause, choose to do an individual project rather than work in an area he finds uncomfortable, but all students are required to try all three major forms. (Mr Lopes)

517—123 American Writers of the Twentieth Century
(1881) (1882) (1883) A thematic and comparative study of the novel and drama in America from 1900 to the present. Representative authors are Wolfe, O'Neill, Fitzgerald, Dos Passos, Hemingway, Williams, Faulkner, West, Styron, and Agee. (Dr Goodyear)

518—3 Milton and Spenser
(1893) Students read shorter works of these two masters in preparation for study, in the second half of the term, of either Spenser's *The Faerie Queene* or Milton's *Paradise Lost*. The class meets in tutorials when reading the epics. (Mr Kalkstein)
(Not offered in 1977-78)

527—3 Chaucer and his Age
(1903) The wit, poetry, and genius of the later Middle Ages and Renaissance, as seen in Chaucer and medieval drama. (Mr Regan)

528—3 The Metaphysical Poets, and After
(1913) A study of the line of wit and paradox in such seventeenth century poets as John Donne, George Herbert, and Andrew Marvell, the nineteenth century re-emergence of the metaphysical strain in the poetry of Gerard Manley Hopkins; and its continuation into the twentieth century. Background readings are assigned in the Bible, Plato, and classical mythology. (Mr. Regan)
(Not offered in 1977-78)

The following Theatre courses, which are related to English studies, have no prerequisites: Theatre 22 (Public Speaking), Theatre 28 (Shakespearean Workshop), and Theatre 29 (Playwriting). These may be found under Performing Arts.

Other courses related to English are Art 311 (Contemporary Communications), Classics 30 (Epic Poetry), Russian Lit 500 and Soviet Lit 501 (Russian Lit and Soviet Lit in English). These last two courses may be found under the Interdisciplinary section.

History and the Social Sciences

The diploma requirement for history is successful completion of *United States History (History 35)* plus one trimester elective taken in the Upper or Senior Year.

Two of the courses offered for Juniors and Lower Middlers — China Today and the Emergence of Man — are designed to introduce the students to a culture different from their own, while one — State and Local Government — introduces the students to the subordinate levels of the American political system imperfectly understood by most citizens. The basic offerings at this level, however, are three courses focused on the study of great men.

The History Department recommends that during the Junior or Lower Middle years each student should take one term of biographical study. The selection should be made from *History 20, 21,* and *22.* The Department believes that study in one of these courses will not only give the student an introduction to history through the study of great men but will also enable him to acquire certain fundamental skills in preparation for upper-level history and social science courses. The Department will emphasize various skills in reading, note-taking, the definition of historical and social science terms, the use of evidence, and the writing of historical essays.

The courses in history are offered to Upper Middlers and Seniors. They are based on the conviction, that a knowledge of the past is essential if an individual is to function effectively as a citizen in a modern democracy. Again, the approach is topical; the traditional aim of training students to handle historical material with discretion and to write essays containing substantive factual support for general statements remains; the pedagogical techniques for accomplishing this are constantly under review.

Multi-disciplinary courses in the social sciences are also available for Upper Middlers and Seniors who wish to study particular societies of the twentieth century and who wish to have a work-study off-campus learning experience.

The essential purpose of all courses is to give the students training in the understanding of domestic and international problems that will serve them well as citizens. It is also hoped that for some students the courses may kindle an interest in the study of human society, past and present, that can be a source of pleasure and profit all their lives.

Courses in the Social Sciences

12—1 (2121) **12—2** (2122) **12—3** (2123) **An Introduction to Government and Politics: A Study of State and Local Government**

Man is a political being and the political environments closest to him, although the ones he may be least aware of, are those of his own community and state. Many people know that there is some kind of local government but few know how the officials are chosen and what they do after they are chosen. Everyone knows they must pay many kinds of taxes but few know how tax money is spent in the community. There is clearly some kind of relationship between the town and the state but the nature of the relationship may not be clear to very many. This course focuses on the governments closest to us, the ones that all of us have to deal with in some way at some time. (Mr. Gurry)

14—1 (2141) **14—2** (2142) **China Today**

Since about one-fifth of the earth's population is Chinese, what happens in that country is of tremendous significance to the rest of the world. One of the questions often asked by observers about Communist China is, "Will it last?" In this course we examine some of the ideas and experiences from China's past that are most remembered and honored (or dishonored) in its present. This exercise makes us, if not instant prophets, at least well-informed observers of the adjustments that China's aging and shifting leadership will have to make in the future. Emphasis is also put on the development of the student's skills in history: reading, note-taking, and writing are stressed, in preparation for later work in the field. (Ms. Sizer)

15—12 (2154) **The Emergence of Man (T2)** (a two-term commitment)

Using an anthropological approach, this course concerns itself with the development of the human species and of human society. After an introductory study of two contemporary hunting and gathering societies, the course focuses on the origins of humanness, tracing man's biological and cultural development during the Pleistocene Age. With the arrival of modern man, students consider the emergence of complex societies, using evidence from Jarmo to explore the implications of the Neolithic Revolution, and from Sumer to study the advent of civilization. A wide variety of materials are used: readings (including materials published by the American Anthropological Association), films and filmstrips, fossil casts, and artifacts. In addition, considerable use is made of the resources of the Peabody Museum of Archaeology.

401—0 (2810) **Man and Society: Urban Studies**

Four prepared class periods. For Upper Middlers and Seniors. Prerequisite: Permission of the instructor; Washington Interns are not eligible. A multi-disciplinary course in the social sciences that focuses on the post-World War Two American city. Fall Term: Four prepared class periods. During this term the class studies three topics: (1) the relationships among racial, religious and ethnic groups, (2) power, leadership and decision making, (3) poverty, its physical and cultural manifestations. For the Winter Term students live at the South End House in Boston and work in internships in public and private community and city-wide agencies. The work job is the key part of the Winter Term. In the winter the students develop, with the instructor's guidance, individual goals and criteria to measure the success in achievement of these goals. Readings, weekly discussion groups, and community involvement grow out of the job experience and life in the South End. Each student keeps a journal during the Boston part of the course. The Spring Term opens with a week's evaluation by each student of his winter's experience. Then each student does a tutorial project on a question which was formulated as a result of the Fall Term's classroom study or the Winter Term's job experience. (Mr. Lyons)

(Not offered in 1977-78)

403—12 **Environments and the Individual**
(2831) (2832) Four prepared class periods. An exploration of the ways in which different societies shape growing persons, whether by conscious or unconscious design, and of the meaning of individual freedom within a social context. The course begins with a study of the socialization of children and young adults in a primitive tribe, then examines the efforts of nineteenth century theorists such as Fourier, Owen and Marx to explain individual learning or social change, and to design working Utopian communities. Moving into the twentieth century, the class compares psycho-analytic approaches to understanding human growth with behaviorist concepts of learning and teaching. We will concentrate during the Winter Term on the special problems and strengths of minority group members (blacks and Puerto Ricans) within American society, and seek to analyze elementary and secondary schools (including Phillips Academy) as organized environments

All students undertake some kind of community service or investigative fieldwork during the course in order to directly involve themselves in the creation or analysis of social environments near at hand

Texts include: Thomas, *The Harmless People*; Marshall, *!Kung of the Nyae Nyae*; Erikson, *Childhood and Society*; Skinner, *The Technology of Teaching*; Myerson, ed., *Two Blocks Apart*, and Dennison, *The Lives of Children*. (Ms. Lloyd)

404—3 **Introduction to Economics**
(2843) Four prepared class periods. For Seniors. This course is an introduction to economic theory and its application to the real world. It focuses on the nature of capitalism and the Marxian critique of the capitalist system. It considers demand, supply, and prices; it investigates the decline of free enterprise and the rise of oligopolies and multinational corporations. It looks at the managed capitalism of the United States and the role of the federal government's fiscal and monetary policy in economic growth. Finally, it discusses selected economic problems today, particularly agriculture, international development, and the concept of abundance. Readings include McConnell, *Economics*; Heilbroner, *Inquiry into the Human Prospect*; Potter, *People of Plenty*; and Meadows et al, *The Limits to Growth*. (Mr. Sewall)

History Courses

20—1 **Leaders of the Western World: The American Scene**
(2201) **20—2** (2202) **20—3** (2203) Four prepared class periods. For Juniors and Lower Middlers. As a comparative study of American leaders, the course deals with the lives of men and women who made significant contributions in several fields of endeavor. Biographies are read and studied to determine what circumstances motivated these leaders, what traits they had, how they responded to varying challenges, and why they are considered great historical figures. Qualities of leadership, psychological explanations, contemporary American eras, and biographers' methodologies are all components of this study. Course materials include selected biographies of men and women from the days of John Winthrop and Anne Hutchinson to those of Martin Luther King. Representative paperbacks used are: Samuel Eliot Morison, *Christopher Columbus, Mariner*; Marquis James, *Andrew Jackson, The Border Captain*; and Thomas T. Lyons, *Black Leadership in American History*. (Mr. Frederick and other members of the Department)

21—123 **Leaders and Issues of the Western World: The European Scene**
(2211) (2212) (2213) Four prepared class periods. Open to Juniors and Lower Middlers. A full-year sequence but may be elected on a term basis. The course covers roughly the medieval to early modern period of European history and the personalities and ideas that influenced it. An attempt is made to recreate the climate of former ages by including not only historical facts but the ideas and movements which changed civilization through literature, art, and the interplay of political, religious, and social forces. Course material includes biographies, plays, or studies in social history and some reading of original texts. Representative titles of paperbacks used are *Medieval People*, by Eileen Power, *Saint Joan* by G. B. Shaw, *The Agony and the Ecstasy* by I. Stone, R. Bainton's *Martin Luther*, Mattingley's *The Armada*, and *The Splendid Century* by W. H. Lewis. The Fall Term covers roughly the period up to the early Renaissance; Winter Term, Renaissance and Reformation; Spring

Term, the religious wars, the development of national states, and the struggle between Absolutism and Constitutional Government. (Mr Royce and other members of the Department)

22—3 **Asian Biography**
(2223) Four prepared class periods. For Juniors and Lower Middlers. This course will deal with the lives of Mao Tse-tung, Hirohito and Gandhi, as well as one extra figure chosen by each student for outside reading and a report to the rest of the class. Besides learning about each person and the environment in which he lived, we will attempt to see how the two acted upon each other. There will also be much emphasis on skills commonly required to do good work in history: discriminating reading, speaking, note-taking and the various forms of writing, which are used in this field. This course replaces Social Science 14. (Mrs. Sizer)

35—0 **The United States**
(2350) Four prepared class periods. For Upper Middlers and Seniors, though normally taken in the Upper Middle year. This course, together with an additional term course to be elected from among the *40, 50* or *60* level history and social science courses, fulfills the diploma requirement in history. *History 35* is based on a series of paperbacks, original documents, and other readings that provide material for a survey of the history of the United States from the period before the Revolution to the present. Early topics stressed are the American Revolution, the establishment of the Federal Union, the age of Andrew Jackson, and the Civil War and Reconstruction. The emphasis then shifts to the industrialization of the United States, the problems that industrialization produced, and the attempts of the American people to deal with these problems. Finally, the course deals with the emergence of the United States as a world power, its part in two world wars, and the problems that it faces today. At the start of the course, emphasis is placed on such skills as close reading, note taking, and the writing of essay questions. Later on the student is introduced to different kinds of historical material, with more emphasis on discussion. In the Spring Term the writing of a research paper represents a major part of the work.

Representative titles are Edmund Morgan's *Birth of the Republic*, two volumes in Macmillan's *New Perspectives in American History* series, two volumes in the American History Series edited by Carl N. Degler and David M. Potter, two volumes in the Wiley American Republic Series, and William E. Leuchtenburg's *The Perils of Prosperity*.

Candidates for the *Washington Intern Program* are selected from students taking *History 35* as Upper Middlers.

41—123 **East Asia in Revolution**
(2411) (2412) (2413) Four prepared class periods. For Upper Middlers and Seniors. "Revolution" has become cheap currency, but there is really little else that can appropriately characterize the movement of Chinese and Japanese histories over the past century. The course is thought of as a year-long course, but it is offered in three term-contained units as follows. Fall: THE TRADITIONAL EAST ASIAN SETTING; Winter: THE IMPACT OF THE WEST; Spring: THE EAST ASIAN RESPONSE.

To begin to understand the dynamics of contemporary East Asia, an attempt must first be made to comprehend the East Asian tradition. For this purpose, the Fall Term's work includes readings from E. O. Reischauer and J. Fairbank, *East Asia. The Great Tradition*; C. P. Fitzgerald, *A Concise History of East Asia*; H. G. Creel, *Chinese thought from Confucius to Mao Tse-tung*; E. O. Reischauer, *Japan, The Story of a Nation*; J. Fairbank, *The United States and China*, and Allie M. Frazier (ed.), *Chinese and Japanese Religions*. The Winter and Spring Terms include readings from Teng and Fairbank, Michael and Taylor, Mary C. Wright, O. E. Clubb, H. Borton, R. K. Hall, A. D. Barnett, R. North, S. Schram, and E. Snow.

The course consists of readings (as noted above), lectures, audiovisual materials, map exercises, and work projects. In short, the overall effort is to introduce American students to Asia through study and critical examination of essentially the past century's histories of China and Japan. (Mr. Royce)

42—123 **The Discovery of India**
(2421) (2422) (2423) Four prepared class periods. For Upper Middlers and Seniors. The title of this course is taken from Jawaharlal Nehru's work written in Admadnagar Fort prison during a five-month internment in 1944. Nehru was seeking to discover India for himself as the molder of an Indian nation. We, as Englishmen before us, are attempting in this short course to begin discovery of the setting, the motivations, and the contemporary problems of an alien people who constitute the second most populous nation on earth. In the Fall Term we are especially concerned with Traditional India: geography, thought, religion, the social setting, and early history. The following Winter Term concentrates on Imperialism (British India), Gandhi, and Indian Independence. Readings may include Nehru, P. Spear, *India: A Modern History* and *India, Pakistan and the West*, H. Smith, *The Religions of Man*, A. M. Frazier, *Readings in Eastern Religious Thought*, P. Woodruff, *The Men Who Ruled India: The Founders*, Vol. I, Robert Payne, *The Life and Death of Mahatma Gandhi*, and M. Brecher, *Nehru: A Political Biography*. (Mr. Royce)

43—0 **Modern Europe: A Survey**
(2430) Four prepared class periods. Open to Upper Middlers and Seniors. The Fall term consists of a background survey of the 16th, 17th, and 18th centuries, with particular emphasis on the political, economic, and intellectual revolutions that helped to mold the modern world. The focus of the Winter Term is the period 1800-1900, with continuing attention given to the shaping of modern thought, the emergence of the nation-state, and the effects of industrialism. In the Spring Term, the course covers topics in 20th century Europe; the two World Wars, and their effect, the nature of totalitarianism, the cold war and the rise of the superpowers.

Reading is from primary and secondary sources, as well as fiction. Visual materials are used where appropriate. This course has proven to be a good preparation for the Advanced Placement Examination in European History. (Mr. Richards)

44—3 **Modern Russia**
(2443) Four prepared class periods. Open to Seniors and to Upper Middlers. After an initial examination of Russia's medieval and early modern background, the course focuses on the past hundred years of Russian history, with a careful study of the revolutionary changes which have transformed that country internally and created one of the great powers of the contemporary world. Although the general orientation is chronological, the course focuses on specific topics of particular significance: the tension between east and west; the rise of the intelligentsia, Lenin and the Bolshevik Party; the Stalinist totalitarian system, Soviet foreign policy; the contemporary Russian mind. Emphasis is placed on political affairs, and especially the Revolution of 1917, but considerable attention is also given to economic, social, and cultural matters. Reading is from a wide variety of sources, both primary and secondary, and also works of fiction. Visual materials, principally films, are also used. (Mr. Richards)

45—1 **International Relations: The Present Patterns**
(2451) Four prepared class periods. For Upper Middlers and Seniors. In its essentials the course is
45—2 limited to the contemporary era of international affairs, a span of years that is now more
(2452) than a quarter of a century old, extending from the diplomacy of World War II to the
45—3 current era of detente. The emphasis is upon the international politics of the world's two
(2453) superpowers, the United States and the Soviet Union: how they created the United Nations, the Cold War, the many alliances, the nuclear arms race, and the numerous confrontations between themselves and their respective allies; how, too, they prompted the formation of the Third World and repeatedly intervened in its affairs with financial aid, advice, arms, alignments and troops; and finally, some reasons why they continue to perpetuate these massive manifestations of their great power. The course does not seek to fix praise or blame but rather to discern and comprehend the main lines of the predicament and to suggest possible alternatives. Textbooks, the periodic literature of journals, monthly and fortnightly publications, and newspapers are all employed. (Mr. Bunnell)

46—2 **Topics in the History of Phillips Academy and Abbot Academy**
(2462) Four prepared class periods or the equivalent. Involving work in the Phillips Academy and
46—3 Abbot Academy Archives on some aspect of history of the schools, the course introduces
(2463) the student to the problems of working with the raw materials of history. Permission of the instructor is required for enrollment. (Mr. Allis)

47—1 **Victorian England: England in an Age of Expansion**
(2471) Four prepared class periods. For Upper Middlers and Seniors. The course is devoted to a study of the major movements and changes that challenged the British people from 1789 to 1901. It is divided into three periods: a study of the background of 1832, the early Victorians, and the late Victorians. The final eight weeks of the course are concerned with the last two periods. Since Victorian literature more directly influences the life and thought of the times than that of any other period of English history, the course examines closely those writers whose works were influential in adapting English minds and institutions to changing conditions. (Mr. Harrison)
(Not offered in 1977-78)

48—1 **The Rise and Fall of the American Presidency**
(2481) Four prepared class periods. For Seniors. The course studies the extraordinary expansion
48—2 of presidential power in law and practice since the 1930's. The American presidency has
(2482) been the focal point of the United States government in times when vigorous government action has been called for. The Great Depression, World War II, the Cold War, the Civil Rights Revolution, the War on Poverty, and the Vietnam War—all called for the increased powers for the executive. And Presidents Roosevelt, Truman, Kennedy, Johnson, and Nixon seized the opportunities to expand presidential power. But in the Nixon administration, the nation saw executive usurpation of illegal powers, a subversion of the Constitution, and a threat of presidential tyranny. The climax was the "imperial presidency" and impeachment. The course consists of class discussions and several short analytical papers. The readings are drawn from: James Barber, *Presidential Character*; Anthony Lukacs, *Nightmare*; and Arthur M. Schlesinger, Jr., *The Imperial Presidency*. (Mr. Lyons)

49—12 **The City in America**
(2491) Four prepared periods. Limited to fifteen Seniors and Upper Middlers. Prerequisite: per-
(2492) mission of the instructor. Fall Term work focuses on the role of the historian and the evolution of the city from prehistoric times through the American colonial period. The Winter Term deals with different "types" of American cities evolving between the Eighteenth and Twentieth Centuries. General readings include: Edward Banfield, *The Unheavenly City Revisited*; Lewis Mumford, *The City in History*; Alexander B. Callow (ed.), *American Urban History*; Charles Glaab and A. Theodore Brown, *A History of Urban America*; several urban novels like Theodore Dreiser, *Sister Carrie*, and various monographs like Gunther Barth, *Instant Cities*. (Mr. Quattlebaum)

49—3 **The City In America**
(2493) Prerequisite: *History 49-1* or *History 49-2*. The student embarks on individual, historical research projects, either on a particular American city or on a selected aspect of several cities.

50—1 **Schools in America**
(2501) Four prepared periods. For Seniors and Upper Middlers. (This course is planned parallel to *History 51, Families in America*, and can be taken in a coordinated sequence with that course, as well as a single term-contained offering.) The course analyzes the purposes for schooling perceived during the nineteenth and twentieth centuries and the institutions Americans created and supported to promote those purposes. Reading is drawn from historical sources and from contemporary social science and philosophy. Students are expected to relate the material to the "aims" of their own educations. (Dr. Sizer)

51—2 **Families in America**
(2512) Four prepared periods. For Seniors and Upper Middlers. (Given parallel to *History 50*. See
51—3 note under that course description.) The course examines family structure, function, and
(2513) development from the colonial period to the present. Sex role, methods of child nurture, economic base of the family, and varieties of family patterns growing out of different ethnic backgrounds are among the major topics studied. Readings are drawn from primary and secondary sources. (Mr. Crawford)

52—3 **Quantitative Historical Data Analysis**
(2523) Four prepared periods. Prerequisite: Permission of the Instructors. This course provides an introduction to the use and abuse of quantitative methods in historical research. Attention focuses on three main areas: elementary statistics, relevant historical literature, and the logic of historical inquiry — that is, the fundamentals of research design. To accomplish these purposes, participants do assigned homework problems on statistics and read exemplary works in the field, in order to discuss their merits and demerits. Most of the reading is from two books: Hubert M. Blalock, Jr., *Social Statistics*; and Robert P. Swierenga (ed.), *Quantification in American History*. (Messrs. Best and Quattlebaum)

53—123 **Women in History**
(2531) In the Fall Term, after an introduction to the study of social organization (including
(2532) economic, religious and familial aspects) the course briefly considers the restrictive posi-
(2533) tion of women in classical Greece. We then study Rome and the emergence from a primitive, agricultural background of an urban, enlightened attitude towards women. The complexities of the Empire and the liberal status of women, particularly in economic affairs, conclude the term. (Mrs. Clark)

The Winter Term starts with the reshaping of Roman laws and customs by the rapidly emerging Christian doctrine; these in turn are changed by the invasions of the Germanic peoples. Charlemagne serves as the prime illustration of this medieval combination of attitudes. In the Renaissance, humanism and rationalism dignified woman as the 'Lady' of courtly love; at the same time the fear of woman as the 'witch' haunted Europe. The Reformation demoted woman from 'Lady' to housekeeper, but it established her more firmly as an appreciated, hardworking partner within the marriage and her rights steadily, if slowly, improved. (Mrs. Clark)

In the Spring Term: Beginning with the eighteenth century revolutions and their call for human rights within a Rule of Reason, the course seeks to learn why political equality for women followed so far behind American women's own declaration of independence in 1848, and what were the ingredients of progress towards Suffrage during the nineteenth century. Then, the vote gained, what did women do with it after 1920? Does the present day "women's movement" reflect traditional American values, or is it a truly revolutionary component of a developing "human liberation" movement? Both — or neither? (Mrs. Lloyd)

54—1 **Art and Architecture in Antiquity and the Middle Ages**
(2541) Four prepared class periods. For Uppers and Seniors. This course is an introduction to Western art from Archaic Greece to fourteenth century Italy. Focusing primarily on architecture and sculpture, it covers major trends in Greek, Roman, Byzantine, Romanesque, and Gothic art. It stresses the basic vocabulary, fundamental questions, and analytical methods of the art historian. (Mr. Sewall)

55—2 **Art and Architecture in the Renaissance and Baroque**
(2552) Four prepared class periods. For Uppers and Seniors. It is *strongly* suggested that students planning to take *History 55* have completed *History 54*. This course covers European art from the Early Renaissance in Florence and Flanders to the Neoclassical movement of the late eighteenth century. (Mr. Sewall)

56—3 **Art and Architecture Since the French Revolution**
(2563) Four prepared class periods. For Uppers and Seniors. It is *strongly* suggested that students planning to take *History 56* have completed *History 55*. This course covers the diverse movements of "modern art" in the nineteenth and twentieth century. It includes occasional visits to museums in Boston and New York. (Mr. Sewall)

History 54, History 55, and either History 56 or Art History 57 when taken consecutively combine to form a full year's preparation for the Advanced Placement Examination in Art History.

Art History 57—3 (2573) **American Art History, 1770-1950**
Prerequisite: *Visual Studies (Art 10).* Focusing on the works of art in the Addison Gallery of American Art, this survey of American Art examines paintings, prints, and drawings. Each week each student chooses one or two artists to study through examination of actual works of art and reading of primary and secondary source material. Artists included: Copley or West, Cole or Doughty, Homer or Eakins, Hassam or Twachtman, Davies or Prendergast, Sloan or Bacon, O'Keeffe or Hopper, Burchfield or Benton, Pollock or Hofmann. Open to Uppers and Seniors. Four prepared class periods per week.

59—123 (2591) (2592) (2593) **Ancient History**
Four prepared class periods. For Upper Middlers and Seniors. The course is concerned with Greek and Roman history from the Minoan Period to the beginning of the Medieval Period. Each term represents a coherent and independent unit. In the Fall Term the survey ends with the world empire of Alexander the Great. The Winter Term covers the period from the beginning of Rome until its transition from Republic to Empire. The Spring Term is concerned with Roman Empire and the transition from Roman to Medieval History. (Mr. Krumpe)

60—1 (2601) 60—2 (2602) 60—3 (2603) **Elizabethan England**
Four prepared class periods. For Upper Middlers and Seniors. The years when England was ruled by the Tudor family were some of the most colorful and pivotal in English history. During those years, crucial political and religious changes were initiated, creativity was encouraged, and England prospered. This course focuses on Elizabeth and her England in the context of the European scene and is intended to be a study in depth. Social and cultural conditions are studied as well as political and economic conditions. The books used include the Neale biography of Queen Elizabeth and *This Realm of England* by Lacey Baldwin Smith. (Ms. Minard)

61—3 (2613) **The Middle East**
Four prepared class periods. For Upper Middlers and Seniors. Few if any regions of the world claim a more compelling interest than the Middle East. From its ancient site of half the earth's cultural antecedents, birthplace of three world religions, landbridge of three continents, eternal East-West corridor, and ceaseless crossroads of conquerors, pilgrims, and tradesmen, the Middle East derives a distinctive character of its own. And this course traces the region's emergence from the decline and fall of the Ottoman Empire (the famous "sick man of Europe") to the present day with an emphasis upon the political and economic aspects of the leading Arab states and Israel. But, as the name Middle East implies, the area is a global intersection and its history reflects a constant interplay between the nations of Africa and Eurasia as well as a certain "presence" of the Superpowers of our time, and it is, therefore, the center of a world security problem. Hence, the course also surveys international aspects with special attention to such matters as Middle Eastern oil and Arab-Israel relations. A term paper is part of the course's requirement. (Mr. Bunnell)

62—12 (2624) **Modern Russia: History and Literature (T2)** (a two-term commitment)
This course, for Seniors only, examines the past 150 years of Russian history and culture in somewhat greater depth than is possible in the one-term course *(History 44).* The first third of the course is devoted to Imperial Russia of the nineteenth century, with an examination both of Tsarist institutions and the growing revolutionary movement. The revolution of 1917 is the subject of close scrutiny, through readings and documents. After surveying the sixty years of Soviet rule, the course concludes with a look at the U.S.S.R. today and its prospects for the future.

Considerable attention is given to the study of literature. From the days of Pushkin in the early nineteenth century, Russian writers have been viewed by the government with fear and suspicion. This is because, despite police harassment and censorship, they have continued to write fearlessly about the most pressing issues of their times. As this course

examines the significant events and ideas of modern Russia, it also examines the reflection of these events and ideas in the fiction and memoirs of such authors as Pushkin, Gogol, Turgenev, Herzen, Dostoevsky, Tolstoy, Chekhov, Pasternak, Bulgakov, Mandelstam, Solzhenitsyn, and writers of the contemporary underground press known as *samizdat*. (Mrs. Powell and Mr. Richards)

63—1 (2631) **63—2** (2632) **Major "Isms" and the Nation State**
Open to Upper Middlers and Seniors. The course is fundamentally a study of government as seen through four prevailing "isms" of the contemporary world, namely: capitalism, socialism, fascism, and communism. The approach is largely descriptive, analytical, and comparative and is therefore concerned with the "isms," historical context, their basic principles and policies, their philosophical and psychological roots, their nature as ideological systems and de facto governments, their variant structures and objectives, their mutual antagonisms and incompatibility, and their place in the balance of international ideas. It is a course in which institutions, persons, principles, concepts, theories, and ideas abound; and although it is not a complete presentation of the subject, it is a serious and complex introduction. (Mr. Bunnell)

Interdisciplinary

All courses are electives. Courses that cross over department lines are listed here as a reference for students when planning their programs of studies.

Basics
10—1 (9101) **10—2** (9102) **10—3** (9103) **Study Skills**
Four prepared class periods.
Permission of the instructor required. The course builds both reading and organizational skills. The reading program seeks to increase reading efficiency (comprehension and speed) by teaching the student how to become more thougthfully and actively involved with his material. On the organizational level, the student is involved in skill-building in such areas as note-taking, retention, and exam preparation. (Dr. Irish)

Synthesis
40—1 (9401) **40—2** (9402) **40—3** (9403) **Synthesis: A Multidisciplinary Approach to Problems**
Four prepared class periods. Open to Seniors. This course focuses on problems which require for their understanding and resolution the concurrent use of a number of disciplines.
(Not offered in 1977-78; to be offered 1978-79.)

Literature
45—123 (9451) (9452) (9453) **Literature of the Quest**
Four prepared class periods. Open to Seniors Focusing on the ancient pattern of the hero's journey, the suffering endured and the insight gained, the course asks students to interpret elements of the human quest from a variety of disciplines. In the Fall Term readings include *Oedipus Rex*, the Abraham cycle, Kierkegaard's *Fear and Trembling*, *Don Quixote* (parts), *Martha Quest*, *Black Elk Speaks*, and Castenada's *Journey to Ixtlan*. Secondary sources include Campbell's *Hero with a Thousand Faces*, Jung's *Man and His Symbols* and Becker's *The Denial of Death*. In the Winter Term we will consider the suffering and violence met on the quest, and look at modern media, including Bergman's *The Seventh Seal*, as well as read the passion story of Jesus, *King Lear*, Wiesel's *The Gates of the Forest*, Kosinski's *The Painted Bird*, West's *Miss Lonelyhearts* and Flannery O'Connor's stories. The Spring Term will explore the final, tragi-comic vision of the quest and the hero's return. Works include the Jacob cycle, the Gospel of John's resurrection narratives, *The Tempest*, *The Wizard of Oz*, Albee's *Who's Afraid of Virginia Wolff* and Buechner's *Entrance to Porlock*. (Mr. Zaeder)

Comparative Literature Courses in Translation

Russian Lit 500—1 (9501)
Russian Literature in English
Four prepared class periods. The themes of romanticism, realism, the "superfluous person," Slavophilism, westernism, nihilism, perfectionism, and humanism are examined in the works of Pushkin, Lermontov, Gogol, Turgenev, Goncharov, Ostrovsky, Dostoyevsky, Tolstoy, Chekhov, and Gorky, both as styles of literary expression and as stimuli of Russia's social and political development. (Mr. Lane)

Soviet Lit 501—2 (9512)
Soviet Literature in English
Four prepared class periods. A study of the conflict of individual freedom and social purpose in Russia since the Revolution, based on selected translations. Socialist realism, satire, divided personality, and dissent are examined against the Soviet political and economic background and in the perspective of Russian literary traditions. (Mr. Lane)

Mathematics

Mathematics at Andover is addressed to several overlapping audiences within the student body: the future citizen of late twentieth century society, immersed in a culture which has been shaped to a large extent by mathematical perceptions of reality; the future user of mathematics, whose vocation may depend upon special knowledge of a mathematical sort; and the future mathematical scholar, who may turn his energies and curiosity to the organization or dissemination of mathematical knowledge.

To serve all needs the mathematics curriculum is built around a core sequence of eight trimester courses, three of elementary algebra, two of geometry, and three of precalculus topics, completion of which will satisfy diploma requirements and provide a firm foundation for more advanced study. A student entering with little or no prior study of algebra normally starts with *Mathematics 10*; those with a partial year of algebra enter *Mathematics 19-1* and continue to *Mathematics 20-23*. Students entering with a full year of algebra enter *Mathematics 20-12*. Those with one year of algebra and one year of geometry will satisfy diploma requirements by taking *Mathematics 30* for one year.

Placement of new students in the appropriate first course is made in light of the record in previous schools and the results of a self-administered diagnostic test in elementary algebra which is sent to newly admitted students in the Spring.

The College Entrance Examination Board Achievement Test in Mathematics is most appropriately taken near the end of or immediately following *Mathematics 30, 31,* or *35*.

Beyond the required level, *i.e., Mathematics 30* or *35*, the department offers many electives, some of which lead up to and well beyond the Advanced Placement Examinations of the College Board. The prerequisites of such courses should be carefully noted, particularly by those students who are involved in terms away from Andover.

In addition to its course offerings, the department manages the campus computer time sharing system. The computer, a Digital Equipment Corp.

PDP-11/45 is housed in the mathematics building and serves sixteen teletype-writer terminals, of which ten are available for student use in courses and projects.

Courses Leading to Satisfaction of the Diploma Requirement:

10—0 **Elementary Algebra**
(3100) Five prepared class periods. A year-long course for students who have had less than half a year of algebra. Stress is placed on an understanding of the elementary structure and language of the real number system, on the manipulative skills of simplifying expressions and solving first and second degree equations, and on the study and graphing of polynomial functions. Significant work is done with word problems, inequalities, irrational numbers, right triangle trigonometry, and an introduction to computer programming in BASIC. Prerequisite: None.

19—1 **Algebra**
(3191) Five prepared class periods. A course completing elementary algebra for entering students
19—3 whose knowledge is substantially less than the coverage of *Mathematics 10-0*. Prerequisite:
(3193) From a half to a full year of algebra.

20—12 **Geometry (T2)** (a two-term commitment)
(3204) Five prepared class periods. A two-term course for students who have had a *strong* ninth
20—23 grade algebra course, but no geometry. This course is a thorough and systematic presen-
(3205) tation of synthetic Euclidean geometry. Strong emphasis is placed on the need for precision and clarity in the writing of formal proofs. Prerequisite: A complete course in elementary algebra comparable in coverage to *Mathematics 10-0*.

30—0 **Intermediate Algebra and Elementary Functions**
(3300) Five prepared class periods. A year-long course for entering students with one year of algebra and one year of geometry. Completion of this course satisfies the diploma requirements. Topics include use of the computer, the structure of groups and fields, with applications to elementary algebra, polynominal, circular, exponential and logarithmic functions and their applications. Prerequisite: Credit for one year of algebra and one year of geometry.

31—0 **Geometry and Circular Functions**
(3310) Five prepared class periods. A year-long course for entering students who have studied algebra in the ninth and tenth grades but who have not studied geometry. The course covers Euclidean and coordinate geometry, the circular functions and their geometrical applications. Prerequisite: Credit for one year of elementary algebra and one year of intermediate algebra.

32—3 **Precalculus**
(3323) Five prepared class periods. Logic, sets, the structure of groups and fields with applications to fundamental processes of algebra. Solution of equations and inequalities. Prerequisite: *Mathematics 20-12*.

35—12 **Precalculus (T2)** (a two-term commitment)
(3354) Four prepared class periods. Mathematical induction, exponents, use of the computer, relations and functions. Major topics of intermediate algebra and trigonometry considered from a functional point of view, with particular emphasis on polynomial and circular functions. Completion of this course satisfies the diploma requirements. Prerequisite: *Mathematics 32-3*.

36—3 **Precalculus**
(3363) Four prepared class periods. One-to-one functions, exponential and logarithm functions. Applications of circular functions. Required of students coming from *35-12 (T2)* who plan to study calculus. Prerequisite: *Mathematics 35-12 (T2)*.

38—1 **Transcendental Functions**
(3381) Four prepared class periods. The coordinate geometry of conic sections extended, inverse functions, logarithmic and exponential functions, mathematical induction, applications of circular functions. Completion of this course satisfies the diploma requirements. Prerequisite: *Mathematics 37.*

40—12 **Elementary Functions (T2)** (a two-term commitment)
(3404) Five prepared class periods. A two-term course for entering Seniors who have not had trigonometry but have studied three years of mathematics in high school. Required of those students whose prior work may be found not to satisfy diploma requirements. Work focuses on a review of the fundamentals of algebra, and the elementary functions. In certain cases high quality work in the Fall Trimester of *40* may be regarded as satisfying diploma requirements, but the Winter Trimester of *40* is a prerequisite for continuing study at the *50* level. Prerequisite: Credit for three years of high school mathematics. Not open to students from *Mathematics 30* or *35*.

Elective Courses

Only courses with sufficient enrollment will be given.

21—3 **Intuitive Calculus**
(3213) Four prepared class periods. Open to Juniors and Lower Middlers. This course introduces limits in an intuitive manner and begins to develop the calculus of polynomials so useful in elementary Physics. Prerequisite: None.

41—1 **Exploring Data**
(3411) Four prepared class periods. An introduction to techniques of uncovering the useful information contained in masses of numerical data. No reliance is placed on the knowledge
41—2 of or development of heavy mathematical tools. Prerequisite: None.
(3412)
41—3
(3413)

42—12 **Probability and Statistics (T2)** (a two-term commitment)
(3424) Four prepared class periods. Includes sample spaces, counting problems, sampling, conditional probability and applications using the computer. Random variables, expected value, variance and standard deviation. Applications of the binominal and standard normal distributions, hypothesis testing and statistical inference. Prerequisite: *Mathematics 30* or *35-12.*

42—3 **Statistics**
(3423) Four prepared class periods. Applications of statistical inference to social and physical sciences. Estimation and hypothesis testing. Prerequisite: *Mathematics 42-12 (T2).*

45—1 **Mathematics Revisited**
(3451) Four prepared class periods. A course of refreshment for those who have satisfied diploma requirements early in their high school careers but who have since discovered a vocational or other need for resuming study. Prerequisite: Prior completion of diploma requirements and departmental permission.

46—3 **Theory of Numbers**
(3463) Four prepared class periods. A study of the elementary theory of numbers, emphasizing the arithmetic of the integers. First consideration given to divisibility and prime numbers, ideas that underlie much of the later work. Other topics considered are congruences, Diophantine equations (and Fermat's Last Theorm), continued fractions, and certain special numbers. Prerequisite: *Mathematics 30* or *35-12.*

47—1 **Computer Programming**
(3471) Four prepared class periods. An introduction to programming in the BASIC-PLUS code.
47—2 The solution of mathematical problems with computer assistance. Prerequisite:
(3472) *Mathematics 30* or *35-12.*
47—3
(3473)

49—3 **Problems, Brain Twisters and Puzzles**
(3493) Four prepared class periods. The course investigates a wide variety of mathematical problems. The problems, whose statement may range from one short sentence to a long paragraph, are selected from sources such as prize contests and collections of mathematical problems and puzzles. Both the technique of how to begin to solve a problem and the skills needed in the actual solution are stressed. Prerequisite: *Mathematics 30* or *35-12*.

51—1 **Elementary Calculus**
(3511) Five prepared class periods. The first of a three course sequence that covers the syllabus for the AB Advanced Placement Examination of the College Entrance Examination Board. Topics covered include: review of functions and graphing, theory of the definite integral, introduction to the derivative and its applications. Prerequisite: *Mathematics 30* or *36-3*.

52—12 **Elementary Calculus (T2)** (a two-term commitment)
(3524) Five prepared class periods. Theory of the derivative, chain rule of differentiation, related
52—23 rates, Rolle's Theorem, Mean Value Theorem, techniques and applications of integration,
(3525) Fundamental Theorem of the Calculus. Prerequisite: *Mathematics 51*.

54—3 **Infinite Series and Differential Equations**
(3543) Five prepared class periods. This course extends the work of *Mathematics* 52 to prepare the student for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics* 52 or may be taken simultaneously with 52.

55—0 **Honors Calculus**
(3550) Five prepared class periods. A year-long course in analytic geometry and calculus which begins only in the Fall. Students contemplating Off-Campus Projects at some time during the year should not enroll in this course. Enrollment is limited to able and committed mathematics students, as the coverage is more theoretical and extensive than that of *Mathematics 51, 52*. Satisfactory completion of this course prepares for the College Board BC Advanced Placement Examination. Prerequisite: *Mathematics 30* or *36-3*, and departmental permission.

61—0 **Calculus Continued and Other Topics**
(3610) Four prepared class periods. The course completes preparation for the College Board BC Advanced Placement Examination, but also includes additional topics at the discretion of the instructor. Prerequisite: *Mathematics 52*.

65—0 **Linear Algebra and Vector Calculus**
(3650) Four prepared class periods. For students of demonstrated ability and interest who intend to continue their studies of mathematics in college. Vector spaces, linear transformations, matrices, determinants, systems of linear equations, the calculus of functions with vector arguments and vector values. Prerequisite: *Mathematics 55* or its equivalent.

Special Courses

30—1 **Mechanical Drawing (Elementary)**
(3701) Two prepared class periods and four unprepared. Not open to Juniors. A term-contained
30—2 beginning drawing course that includes the use of drawing instruments, lettering, geo-
(3702) metric constructions and loci, sketching, orthographic projection, spatial relations, and sectioning. Special stress is placed on a thorough mastery of fundamental concepts and skills.

31—2 **Mechanical Drawing (Intermediate)**
(3712) Two prepared class periods and four unprepared. A term-contained drawing course in
31—3 applied Descriptive Geometry and Graphics involving further work in sectioning and con-
(3713) ventions, isometric and oblique pictorial projections, intersections, revolution, primary auxiliary views, developments, and dimensioning. Prerequisite: *Mechanical Drawing 30*.

32—3 **Mechanical Drawing (Advanced)**
(3723) Two prepared class periods and four unprepared. A term-contained technical drawing course consisting of substantial work in detail and assembly engineering drawing, perspective, print reading, successive auxiliary views, and fundamentals of design. Students with

special interests are given an opportunity to do additional work in a related field such as rudimentary structural or naval architectural drawing, sheet metal layout, or graphic presentations of data. Prerequisite: *Mechanical Drawing 31*.

30—1 (3731) **30—2** (3732) **30—3** (3733) **Navigation (Coastal Piloting)**
Four prepared class periods. Not open to Juniors. A term-contained course in Piloting: i.e., marine navigation within sight of land or landmarks. Substantial dead reckoning and special case plotting is done on charts and small area plots. Aids and dangers to navigation are studied. Practical use is made of Tide and Current Tables, Light Lists, compass correction, radio, radar, and Loran.

31—2 (3742) **31—3** (3743) **Navigation (Celestial)**
Four prepared class periods. A term-contained course in Celestial Navigation: i.e., navigating at sea by means of the stars, sun, moon, and planets. Nautical astronomy is studied. Significant work is done in coordinate conversion, time, altitude intercept theory, the solution of the Navigational Triangle by HO 214, HO 229, and the Nautical Almanac, special lines of position, the use and correction of a marine sextant, times of observational twilight, and "a day's work" at sea. Prerequisite: *Navigation 30*.

Modern Foreign Languages

The foreign language diploma requirement is competence at the level of the third year of a modern or ancient language. Such competence is usually established by successfully completing the ninth trimester. Able students may fulfill the requirement at the end of eight, or even seven trimesters, by passing a special examination set by the department concerned.

Placement of new students in the appropriate first course is made in light of the record in previous schools, information received on questionnaires sent to newly admitted students and their current teachers in the spring, and a personal interview with the chairman of the particular language department, when deemed necessary.

All foreign languages offered at Phillips Academy are acceptable for college admission. For certain fields of concentration and in certain areas of graduate study, especially for the Ph.D. candidate, specific modern languages are often required. Consultation with academic advisors and college counselors is invited.

The *10-20* courses are designed primarily for students of proven linguistic ability wishing to begin a second or third language in their Senior year, and these courses are *not* recommended for students of limited language ability. Entering Seniors with no previous language experience must pass a *10-20* course to obtain their diplomas.

All students are encouraged to continue foreign language study beyond the minimum requirement.

French

The French Department offers a six-year course of study. The first two years are devoted to teaching the basic language structure. In the third year, while continuing to progress in the language, a student is given the opportunity to

choose the trimester courses which best serve his needs. Fourth and fifth-year courses offer study in depth of both literature and civilization. Students who demonstrate unusual aptitude for and interest in the language during the first year of study are invited to enter special sections which move ahead more rapidly without demanding more time. Those who complete the accelerated sequence may meet the diploma requirement after seven trimesters as they move directly into fourth-year courses.

In all courses, students are taught to understand, speak, read, and write the language, paralleling as closely as possible the natural order of learning. French is the language of the classroom and at no time does the department teach the art of translation.

10—0 **French**
(4010) Five prepared class periods. First-year French for students who have had no previous courses in the language. Students make frequent use of the language laboratory. Listening comprehension and the use of basic patterns of French speech are emphasized. Elementary grammatical and idiomatic structures are introduced, as well as simple reading material. Text: Capelle et Capelle, *La France en Direct*.

10-20—0 **French**
(4020) Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence. Text: Benanmou, Ionesco, *Mise en Train*.

11—0 **French**
(4030) Five prepared class periods. This first-level French course is designed to help the student who has had previous instruction in the language, but whose knowledge and skills are not secure enough for him to enter a regular second-level section. The course emphasizes the development of aural-oral skills and prepares for *French 21* the following year. Texts: Pucciani et Hamel, *Langue et Langage*; Valette et Valette, *Lisons*, Cambell et Bauer, *Arsène Lupin*.

12—23 **French (T2)** (a two-term commitment)
(4045) Five prepared class periods. An accelerated course offered to students of high ability. This course is continued in *French 22*. Texts: Pucciani et Hamel, *Langue et Langage*; Pimsleur, *C'est la vie*.

20—0 **French**
(4050) Five prepared class periods. For students who have completed *French 10*. While continuing to develop the audio-lingual skills, the aim of this course is to teach reading and the ability to understand non-technical French prose without recourse to translation. Texts: Capelle et Capelle, *La France en Direct*, Valette et Valette, *Lisons*.

21—0 **French**
(4060) Five prepared class periods. For students who have completed *French 11* and for new students who qualify through teacher recommendation or placement examination. The aim of the course is similar to that of *French 20*. Texts: Cambell et Bauer, *La Dynamite*; Gibson, *Anthologie*; Ionesco, *Victimes du devoir*, Pucciani et Hamel, *Langue et Langage*.

22—12 **French**
(4071) Five prepared class periods. An accelerated course open to students who have completed
(4072) *French 12* and to properly qualified new students. Successful completion of this course permits students to enroll in regular courses at the third-level during the Spring Term. Texts and reading materials include: Cambell et Bauer, *La Dynamite*, Sartre, *Les Jeux sont faits*; grammar review materials especially prepared by the department.

Third-Level Courses

At the third-level, progress in all language skills continues through their application in the study of a particular area

These courses are designed to provide program flexibility trimester by trimester To provide continuity, systematic and coordinated grammatical review is incorporated sequentially into all courses Independent grammar review materials have been especially prepared by the department for this study.

30A — 0 (4080) **Language Review and Contemporary French Life**
Four prepared class periods For students who have successfully completed *French 20* but who have need of further instruction in basic language structures The Fall Term reviews the last of *La France en Direct 2*. The last two terms are devoted to the same material as that covered in *French 30*. By permission of the Department Chairman.

31 — 123 (4101) (4102) (4103) **Selected Readings**
Four prepared class periods. Reading comprehension skills are developed through a study of texts such as the following Simenon, *Le Chien Jaune*; Saint-Exupéry, *Le Petit Prince*; Pagnol, *Topaze*, Vercors, *Le Silence de la mer*, Goscinny, Uderzo, *Astérix et Obélix: Le Tour de Gaule*, Gide, *Symphonie Pastorale*, Sartre, *Les Jeux sont faits*.

32 — 2 (4112) **32 — 3** (4113) **Village Français**
Four prepared class periods Using *Village en Vaucluse* by Wylie and Bégue as a basic text, the course, conducted in French, attempts to reveal the peculiar characteristics of the French people as reflected in the microcosm of a town Several American and French towns are examined as bases of comparison Additional readings may include Wylie, *Les Deux Villages*, Lynde, *Middletown, U.S.A.*, Pagnol, *Marius*, Michaud, *Guide France*, "Nouvel Observateur", Daninos, *Les Carnets du Major Thomson*; Maurois, *Histoire de la France*; articles from both national and regional newspapers, and texts used by French students studying American civilization (Mr Sturges)

33 — 123 (4121) (4122) (4123) **French Civilization**
(Similar to, but more difficult than, the former *French 30*.) Four prepared class periods Students who elect this course should be interested in France's cultural achievements, influence, and contemporary life. The course is a combination of lectures by instructors, class discussions, slide and film presentations, students' oral reports, and written themes on a wide variety of topics It is complemented occasionally by the reading of short literary and historical selections illustrating cultural and artistic developments. Areas of study include history, geography, economics, art and architecture, music, as well as modern French institutions, French youth, and the role of women in French society The Paris weeklies *L'Express* and *Paris-Match* are read and used extensively by students in the third trimester. (Mr Krivobok)

34 — 1 (4131) **34 — 2** (4132) **Intensive Conversation and Phonetics**
Four prepared class periods A special emphasis on specific aspects of spoken French Intended for students who understand French rather well but need to gain confidence and efficiency in speaking Dialogues, speeches, debates, interviews, and role-playing are reinforced by study of topical vocabulary, idiomatic expression, and applied phonetics Text Frautschi and Bouygues, *Pour et contre*.

35 — 2 (4142) **35 — 3** (4143) **Written Expression**
Four prepared class periods Study and writing of basic sentence structures and their integration into paragraphs and compositions Students' writing, to which instructors give close, individualized attention in small classes, is based generally on selected, short readings The course seeks a balance between different forms of writing, both original and imitative, (description, narration, dialogue, exposition, communication). Texts used may include Hergé, *Les Aventures de Tin Tin*; Limouzy et Bourgeacq, *Manuel de Composition française*.

36—123 Literature and Film
(4151) (4152) (4153) Four prepared class periods. Each term two works of fiction are studied along with movies based on them. An effort is made to combine literary and cinematic excellence in choosing materials for the course so that each book or film may be studied individually for its own merits as well as compared with the other version.

The books and movies for this course vary from year to year. In 1976-77 authors included were Rohmer, *Le Genou de Claire*, Truffaut, *L'Enfant sauvage*, Godard, *A Bout de souffle*, Costa-gavras, *Compartiment Tueurs*. (Ms. Schorr)

38—3 French for Tourists
(4163) Four prepared class periods. The aim of this course is to provide the practical vocabulary needed to cope with everyday situations: how to handle affairs at the airport, going through customs, making a hotel reservation, taking a taxi, the subway, or a bus, visits to the bank, the hairdresser, or the doctor, buying clothes or footwear, going to a restaurant, the movies, or the theater, how to use the telephone, travel by train, motoring, and visiting a seaside resort. Emphasis is on oral communication and the acting out of situations in class, supplemented by regular use of the language laboratory. (Mrs. Bayard)

39—3 Initiation to the French Theatre
(4173) Four prepared class periods. An active participation course in which the student follows one play from the initial reading through its final production, taking part at each step of the way. Four major phases: Reading, Analysis, Production, Performance. Throughout the course, the vocabulary of French theatrical production is studied and used. (Mrs. Kirkland)

40—123 French
(4181) (4182) (4183) Four prepared class periods. The course consists of three term-contained units and may include the reading of French classics and the works of modern authors, as well as conversation and composition. The choice of texts in each trimester is determined by the class and the instructor.

42—0 French Literature
(4190) Four prepared class periods. The first year of a two-year sequence leading to the Advanced Placement Examination in French Literature, open to all students who have completed three trimesters of third-level courses and who have the approval of their instructor, and to properly qualified new students. It is a transition from the study of language to the study of literature. Emphasis is placed on vocabulary building, written work, and close analysis of major literary works. Texts include: Camus, *L'Etranger*, Voltaire, *Candide*, Ionesco, *Rhinocéros*, Balzac, *Le Colonel Chabert*, and Mauriac, *Thérèse Desqueyroux*.

This course is also offered in the School Year Abroad program in Rennes.

43—1 French History (formerly French 43-12)
(4201) Four prepared class periods. Open to all students who have completed three trimesters of third-level courses and to properly qualified new students. This course covers the main events and personalities from the reign of Louis XIV to the Second World War. There is a combination of lectures by the instructor, class discussions, slide and film presentations, and student reports. Text: *Initiation à la culture française* by Parker and Grigaut. (Mr. Anderson)

43—2 Le Monde Francophone: French Civilization Outside of Europe
(4202) (Formerly French 33-12) Four prepared class periods. As an international colonial power France spread her culture throughout the world. The course studies the resistance to and the assimilation of French culture by the native cultures. The student has the opportunity to study the 17 French civilizations in West, Equatorial, and North (Arab) Africa as well as the French civilization of the Antilles (Haiti, Martinique, and Guadeloupe) and the United States. In addition to geographical, social, and historical study, selections are read from authors such as President Senghor, Camara Laye, Bernard Dadié, Memmi, Aimé Césaire, Guillaume Oyon M'Bia, Birago Diop. (Mr. Herbst, Mrs. Bayard)

43—3 Québec et les Québécois (formerly French 46-3)
(4203) Four prepared class periods. Because of its geographical situation Phillips Academy has a unique opportunity to merge the study of French with direct observation of and participa-

tion in the North American "French experience" which is just across the nearby Canadian border as well as in the many communities surrounding Andover with large Franco-American populations. Some amount of theory is balanced with observation and analysis of every-day life in Québec province to understand its political, economic, and social institutions, and such areas as religious, educational, and artistic life. Emphasis is on a close study of the media of the province as well as personal involvement through liaison with Québec schools, students, and newspapers, and through contact with French-speaking areas of Massachusetts and New Hampshire. The course may culminate in a trip to Québec. (Mr. Dix)

44—1 **Advanced Conversation and Phonetics**
(4221) Four prepared class periods. Intended for students who understand, read and write French well and who already speak at a competent level, but who feel the need for further drill in conversational patterns, and idiomatic expression. Diction, intonation and elocution are also stressed through memorization, role playing, speeches, and debates.

45—2 **Written Expression and Stylistics**
(4232) Four prepared class periods. Through a process of constant writing and rewriting the student progresses from simple, straightforward communicative writing to a style reflecting nuances of expression. Text: *Ecritures* by Besnard and Coursodon.

50—123 **French**
(4251) Four prepared class periods. Open to students who have completed the fourth-level but
(4252) do not wish advanced placement. The choice of texts is determined by the class and the
(4253) instructor and runs the gamut from *Astérix* to the theater of the absurd. It is taught principally through seminar discussions and conversations, with occasional oral readings and composition.

51—0 **French Language**
(4260) Five prepared class periods. A course designed to meet the requirements of the Advanced Placement Examination in French Language. Open by invitation to students who have completed three terms of fourth level French and to qualified new students. Emphasis is placed on grammar, vocabulary, conversation, composition, and reading, not only in literature, but in current newspapers and periodicals.

52—0 **French Literature**
(4270) Five prepared class periods. The second year of a two-year sequence, open to students who have completed *French 42* and to others who are properly qualified, with departmental permission. This course is an introduction to French literature and prepares for the Advanced Placement Examination in French Literature through the close reading of representative texts including: Corneille, *Le Cid*; La Fontaine, *Fables*; Molière, *L'Ecole des femmes*; Racine, *Phèdre*; Musset, *Lorenzaccio*; Baudelaire, *Les Fleurs du mal*; Sartre, *La Nausée*; and poetry of Hugo, Vigny, Verlaine, Rimbaud, Apollinaire, Césaire, and Damas.
This course is also offered in the School Year Abroad program in Rennes.

60—123 **Contemporary French Literature**
(4281) Four prepared class periods. Open to students who have completed the fifth-level and to
(4282) other well-qualified students with departmental approval. The course consists of three term-
(4283) contained units covering THE PRE-WAR NOVEL, DRAMA and THE POST-WAR NOVEL, respectively. Authors studied may include: France, Barrès, Proust, Gide, Céline, Bernanos, Malraux, Mauriac, Aragon, Saint-Exupéry, Giono, Montherlant, Anouilh, Giraodoux, Aymé, Camus, Sartre, and Robbe-Grillet. *French 60* is not a literary history course. Emphasis is on particular writers and what they add to our understanding of the human condition in our times.

Senior Projects
(9001) Seniors who are taking an advanced French course or who are otherwise qualified may
(9002) do apprentice teaching during either the Winter or Spring Term. They study the tech-
(9003) niques and methods of modern language instruction; and they practice, under careful supervision, in beginners' classes. Seniors may also undertake independent study projects in French under the direction of a faculty supervisor.

German

The German Department offers a six-year course with the purpose of developing the ability to understand spoken German, facility in speaking, reading fluency, and the ability to write German correctly. The more advanced courses give an introduction to German literature since the eighteenth century and a survey of German history, culture and geography. German is used as the classroom language. Extensive use is made of the Language Laboratory.

The Department offers an accelerated course, *German 22*, for students who show unusual ability in *German 10*. After completion of *German 22*, these students enter *German 40* and receive four years of credit after three years of study.

10—0 **German**
(4300) Five prepared class periods. The beginning course seeks to develop aural comprehension and oral expression, as well as a foundation in the basic grammar. The basic patterns of the language are practiced by repetition and variation. Text: Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner*.

10-20—0 **German**
(4310) Five prepared class periods. Open to Seniors. A year-long accelerated introductory course covering the work of the first two levels of the normal sequence.

20—0 **German**
(4320) Five prepared class periods. The systematic study of basic patterns and grammar is continued with Schulz-Griesbach, *Deutsche Sprachlehre für Amerikaner*. Both close and comprehensive reading of modern German prose is practiced extensively. Elementary writing is introduced at this level. Some of the books read include Kessler, *Kurze Geschichten*; Schnitzler, *Der blinde Geronimo*; Remarque, *Drei Kameraden*; Bischsel, *Kindergeschichten*.

22—0 **German**
(4330) Five prepared class periods. An accelerated course for qualified students, covering material of both *German 20* and *German 30*. Successful completion enables a student to enter *German 40*.

30—0 **German Literature**
(4340) Four prepared class periods. Throughout the year grammar is reviewed in Sparks and Vail, *German in Review*. Some of the books read include Brecht, *Kalendergeschichten*; Dürrenmatt, *Der Richter und Sein Henker*, Aichinger, *Der Gefesselte und andere Kurgeschichten*; Dürrenmatt, *Der Beusch der alten Dame*; Ödön von Horvath, *Jugend ohne Gott*. Emphasis is placed on reading, comprehension, vocabulary building, and oral work.

40—123 **German Literature**
(4351) (4352) (4353) Five prepared class periods. Introduction to German Literature. This course prepares for the Advanced Placement Examination. Through detailed stylistic analysis of a number of outstanding works, the students gain an acquaintance with some of the major authors and most significant trends in German literature since 1750. The works read include Brecht, *Der kaukasisische Kreidekreis*; Büchner, *Woyzeck*; Dürrenmatt, *Die Physiker*, Hauptmann, *Bahnwärter Thiel*; Hesse, *Siddharta*; Kafka, *Die Verwandlung*, Mann, *Tonio Kröger*; and selected poems from Goethe to the present.

50—123 **German**
(4361) (4362) (4363) Four prepared class periods. Contents vary according to the needs and interests of the students.

60—123 **German**
(4371) Four prepared class periods. Contents vary according to the needs and interests of the
(4372) students.
(4373)

Senior Project
(9001) Under the guidance of a member of the German Department, a Senior has the oppor-
(9002) tunity to do special work in German. It may include supervised teaching of an elemen-
(9003) tary class or work of his own choice in a special field.

Italian

10-20—0 **Italian**
(4400) Five prepared class periods. Open to Seniors. Open to Uppers by permission of the instructor. A year-long accelerated introductory course covering two years in one. Because students usually come with a background in other languages, progress in speaking, reading, and grammar is quite rapid.

Russian

The Russian Department offers a course of six years of study. An accelerated sequence enables able students to complete four years' work in three, and receive four years of credit. There is also an accelerated course for Uppers and Seniors.

Since Russian is, indeed, more "foreign" to native speakers of English than the traditional languages of Western Europe, the complete exclusion of English during the first term is time consuming and impractical. However, it is the policy of the Russian Department to attain the exclusive use of Russian in the classroom, instructional and conversational, no later than mid-way through the first year's study, and from the first meeting of the accelerated sequence *(12)*. The entire program develops skill in speaking, aural comprehension, reading, and writing.

10—0 **Russian**
(4500) Five prepared class periods. Open to Juniors, Lower Middlers, and Upper Middlers. A year-long elementary course in speaking, listening, reading, and writing. Texts: von Gronicka, *Essentials of Russian*, Bash, *Uchebnik Russkovo Iazyka*, Part I, reference materials.

12—23 **Russian (T2)** (a two-term commitment)
(4515) Five prepared class periods. Especially competent students will be recommended for this accelerated course at the conclusion of one trimester of *Russian 10*. Successful completion of two terms of *12* enables one to enter *22*. Texts are essentially the same as those used in *Russian 10* and *Russian 20*.

10-20—0 **Russian**
(4520) Five prepared class periods. Open to Seniors. Open to uppers by permission of the instructor. A year-long accelerated introductory course covering two years in one. Texts: von Gronicka, *Essentials of Russian*; *Graded Russian Readers* (Heath).

20—0 **Russian**
(4530) Five prepared class periods. Completion of the elementary course with continued emphasis on active use. Texts: von Gronicka, *Essentials of Russian*, Bash, *Uchebnik Russkovo Iazyka*, Part I, Reference materials, and selected literary materials.

22—0 **Russian**
(4540) Five prepared class periods. A year-long accelerated course open to students who have successfully completed *Russian 12* and to other qualified students with departmental permission. Successful completion enables students to advance to fourth level courses. Texts and reading materials are essentially those of *Russian 20* and *Russian 30*.

30—0 **Russian**
(4550) Four prepared class periods. Reading, conversation, and writing, based on a variety of authors. Text: S. Khavronina, *Russian as We Speak It* (Progress-Moscow); Bash, *Uchebnik Russkovo Iazyka*, Part 2, and selected Soviet literary materials.

40—123 **Russian**
(4561) Four prepared class periods. Fall Term, further work in reading, conversation, and writing.
(4562) Texts: L. Muravyona, *Verbs of Motion in Russian* (Progress-Moscow), and selected Soviet
(4563) literary materials.

Winter Term, THE SOVIET PRESS. A view of the Soviet system as reflected in the media. The text is a subscription to a major Soviet newspaper.

Spring Term, SOVIET PROTEST LITERATURE. A view of protest in the Soviet Union as seen through the works of Zamyatin, Solzhenitsyn, Tertz, Daniel, Yevtushenko, Okudzhava, Bulgakov, and others. Authors vary according to needs and interests of the students.

50—123 **Russian**
(4571) Four prepared class periods. Contents vary according to the needs and interests of the
(4572) students.
(4573)

60—123 **Russian**
(4581) Four prepared class periods. Contents vary according to the needs and interests of the
(4582) students.
(4583)

Senior Project
(9001) Under the guidance of a member of the Russian Department, a Senior has the oppor-
(9002) tunity to do special work in Russian. It may include supervised teaching of an elementary
(9003) class or work of his own choice in a special field.

For courses in translation, see the Interdisciplinary section.

Spanish

The Spanish Department offers a sequence of four years; able students, by accelerating after the first year, may complete five courses. The aim is to have the students understand the language and speak it fluently. Spanish is used constantly in the classroom. The students learn to read and write the language with ease, and are given a comprehensive introduction to the literature and culture of Spain and Hispanic America.

10—0 **Spanish**
(4600) Five prepared class periods. Making use of the audio-lingual approach the course stresses understanding and speaking. A minimum of English is used in the classroom. The basic texts are *Español: A Descubirlo*, by Schmitt, Woodford and Marshall (McGraw-Hill) and *Cuaderno de Ejercicios*, by Schmitt, Woodford and Marshall (McGraw-Hill). They are supplemented by language laboratory practice and other audio-visual materials. Exercises and reading and writing are introduced after the student has acquired confidence in oral expression.

10-20—0 **Spanish**
(4610) Five prepared class periods. Open to Seniors. A year-long accelerated introductory course

covering the work of the first two levels of the normal sequence. The basic texts are *Español en Español*, by A. A. Graupera and F. Pace (Van Nostrand Reinhold Co.); *Gramatica Española de Repaso*, by F. Ugarte (The Odyssey Press), and selected readings. Past readings have included such books as: *Cuentos Americanos*, ed. D. D. Walsh (Norton); and *Lluvia roja*, by Jesús Goytortua (Appleton-Century-Crofts).

15—0 **Spanish**
(4620) Five prepared class periods. For new students who have been exposed to Spanish but who are not fully qualified for *Spanish 20*. The course stresses the oral use of the language. Outstanding performance in this course qualifies the student for *Spanish 22* or *Spanish 30*. Text: *Español en Español*, by A. A. Graupera and F. Pace (Van Nostrand Reinhold Co.) and selected readings. Past readings have included: *Cuentos Americanos*, ed. D. D. Walsh (Norton).

20—0 **Spanish**
(4630) Five prepared class periods. A continuation course that emphasizes speaking, reading, simple theme writing, and vocabulary building, including the use of synonyms and antonyms. Oral fluency is stressed in accordance with the principles of the audio-lingual method. The basic text is: *Español: A Sentirlo*, by Schmitt, Woodford and Marshall (McGraw-Hill). Readings beyond the basic text are selected to meet the needs of each class.

22—0 **Spanish**
(4640) Five prepared class periods. Open to students who have completed *Spanish 10* with honors and those who can earn honors through the Fall Term of this course. It covers the equivalent of the material of *Spanish 20* and *30*. Successful completion enables a student to enter *Spanish 40* or *42*. The basic texts are: *Español: A Sentirlo*, by Schmitt, Woodford and Marshall (McGraw-Hill); *Cuentos Americanos*, ed. Walsh (Norton); and selected readings. Past readings have included: *En la ardiente oscuridad*, by Buero Vallejo (Scribner's); *El sombrero de tres picos*, by Alarcón (Macmillan); and *Doña Perfecta*, by Peréz Galdós (Dell Publishing Co.).

30A—0 **Spanish Language Review**
(4650) Four prepared class periods. For students who have successfully completed *Spanish 20*, but have need of further reinforcement in basic language structures. In addition to an intermediate grammar text, readings are selected according to the needs of the students.

30—123 **Aspectos de la cultura y civilización del Mundo Hispánico**
(4661) (4662) (4663) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written composition through a social-studies approach to the culture and civilization of the Hispanic world.

32—123 **Spanish**
(4671) (4672) (4673) Four prepared class periods. An intermediate course which continues to develop oral and aural skills, as well as facility in written expression. Class discussion is based on representative works of literature to be found in the Spanish speaking world.

40—123 **Spanish**
(4681) (4682) (4683) Four prepared class periods. The purpose of the course is to further the student's interest in the Hispanic world through the study of its history and literature. Texts used in the past have been: *Tesoro Hispánico*, ed. Lado et al. (McGraw-Hill); *El Burlador de Sevilla*, by Tirso de Molina (Taurus Ediciones); *Doña Bárbara*, by Rómullo Gallegos (Fondo de Cultura Economica); *Poesiá Hispánica*, by A. A. de Del Río (Holt, Rinehart and Winston).

42—123 **Spanish**
(4691) (4692) (4693) Four prepared class periods. The course presupposes an extensive knowledge of grammar and vocabulary and a fairly fluent ability in conversation. Constant use of the Spanish language in the classroom discussions and written assignments is required. Particularly able students may take the Advanced Placement Examination if they so desire. Texts: Representative works of Pérez Galdós, Unamuno, F. García Lorca, J. L. Borges, Pablo Neruda, and supplementary titles chosen to support the study of these major authors.

52—123 **Spanish**
(4701) (4702) (4703) Four prepared class periods. The course is open to students who have the equivalent of *Spanish 40* or *42*, or with the permission of the instructor. The emphasis of this course is based on a study in depth of two significant authors each term. In the past the following texts have been used: *Cien años de soledad, La Malahora*, by García Márquez (Editorial Sudamericana, Buenos Aires); *Historia universal de la infamia*, by Borges (EMECE, Argentina); *En torno al poema*, ed García Montoro and S. A. Rigol (Harcourt Brace, World); *Tres novelas ejemplares, y un prólogo*, by Unamuno (Austral); *Yerma* and *La casa de Bernarda Alba*, by García Lorca (Losada); *Antología Esencial*, by Pablo Neruda (Losada); *Nazarin*, by Pérez Galadós; *Sonatas*, by Valle Inclán (Austral); and outside reading.

60—123 **Spanish**
(4711) (4712) (4713) Four prepared class periods. Contents vary according to the needs and interests of the students.

Music

The diploma requirement in Music for entering Juniors and Lower Middlers is one trimester of Music, which is satisfied by *The Nature of Music (Music 20)*. This course is also a prerequisite for courses in the History and Appreciation category, but is not a prerequisite for the Applied category. Entering Upper Middlers must take a trimester course in Music or Art at the academy; *Music 20* or its equivalent. Entering seniors need not take a Music course. Exemption from *Music 20* as a prerequisite is granted on the basis of an exam and/or by permission of the Department Chairman. However, there is no exemption from the Music diploma requirement.

Applied

10—1 **Beginning Instruments**
(6101) **10—2** (6102) **10—3** (6103) Three prepared class periods. Open to Juniors, Lower Middlers, and Upper Middlers. Each section of instruments meets three times a week. On non-class days individual practice is required. Each section is taught separately without mixing woodwinds, brass, or strings. After completion of the course, a student should be able to progress to individual private instruction. Instruments taught: flute, clarinet, trumpet, trombone, tuba, and orchestral strings. Limited enrollment.

A fee of $10 per term is charged for rental of school-owned instruments.

11—123 **Recorder Ensemble**
(6111) (6112) (6113) Meeting four times a week, with outside preparation. Prerequisite: *The Nature of Music (Music 20)*, or permission of the instructor. Open to all classes.

This course is designed for the continuation of recorder skills developed in *Music 20*.

12—123 **Brass Ensemble**
(6121) (6122) (6123) Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. The group has an opportunity to perform in Chapel and in other concerts. The ensemble is made into different types of groups, such as trios, quartets, quintets, and double brass choirs, to perform Renaissance, Baroque, and contemporary brass literature.

13—123 **Woodwind Ensemble**
(6131) (6132) (6133) Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. The ensemble is organized to allow a unique and comprehensive experience in the study and performance

of chamber music repertory, in varied sizes of ensembles. Playing chamber music is an essential part in the development of the woodwind student.

14—123 **String Ensemble**
(6141) (6142) (6143) Meeting three times a week, with outside preparation. Open to all classes. Open to qualified intermediate or advanced players by permission of the instructor. These students find a wealth of fine music written for various combinations of instruments, ranging from the relatively easy to the very difficult. Over the centuries composers have considered the strings a favored group. Chamber music is a particularly rewarding experience and is valuable training for all string students.

15—123 **Fidelio Society**
(6151) (6152) (6153) Pass/Fail. Three prepared periods. Open to all classes. This small group of mixed voices is selected from the *Chorus (Music 17)*. It performs on numerous occasions throughout the year both on *Chorus* programs and on its own. Its repertoire includes music of all types, early and modern, sacred and secular. Membership is by audition and is conditional upon good standing in the *Chorus*.

16—123 **Band**
(6161) (6162) (6163) Four prepared periods. Open to all qualified students. Tryouts are held any time before the beginning of a term to test the student's ability and to arrange for seating. Volunteers from all classes who are not enrolled for credit are urged to join, on an extra-curricular basis. There are some school-owned instruments available for student use. All types of music for wind ensemble are rehearsed. It includes marches as well as classical, popular, and show music. Much sight reading is done, and at least one public concert per term is given.

17—123 **Chorus**
(6171) (6172) (6173) Four prepared periods. Open to all qualified students. The *Chorus* is the academy's major singing group, comprised of mixed voices, and performs a variety of choral works, both sacred and secular. No previous choral experience is necessary; just a desire to work hard and enjoy a unique choral experience.

18—123 **Chamber Orchestra**
(6181) (6182) (6183) Four prepared class periods. Open to all classes. Most of the music played is for string orchestra, the best winds in the school are invited to join for larger works. One concert a trimester is regularly scheduled and the orchestra also plays at least once a trimester in the Sunday Chapel service. The membership includes several students from the community who want orchestral experience that is not available in their own schools, and several members of the faculty. While *Chamber Orchestra* may be elected as a credit-bearing course, it is also an activity in which all are invited to participate.

19—123 **Private Instrumental and Vocal Lessons**
(6191) (6192) (6193) Weekly instruction in keyboard, orchestral, and band instruments, in classical guitar, or in voice. For private instruction, covering piano, organ, voice, classical guitar, orchestral and band instruments, there is a separate charge of $65 per term for half-period instruction, or $130 per term for full-period lessons and a nominal fee for the use of practice pianos and organs. A fee of $15 per term is charged for private rental of school-owned instruments.

20—1 **The Nature of Music**
(6201) **20—2** (6202) **20—3** (6203) Five prepared class periods. This course is designed to give a general background in the history, theory, and practical aspects of music. Music from its earliest sources to the present is examined. Also, the role of music and the arts in each of its cultural stages is studied. Students receive some first hand experience with musical instruments. No previous experience in music is required.

History and Appreciation

The following sequence of courses in the history and literature of music is team-taught by members of the department. The sequence takes one and two-thirds years to complete. A course on *Twentieth Century Music* will be given in the

Fall Term 1977. The sequence will be offered again, beginning with *Medieval and Renaissance Music* in the Winter of 1978. Each course is term-contained.

The Nature of Music (Music 20) is a prerequisite for all courses in this section.

22—2 **Medieval and Renaissance Music (to 1600)**
(6222) Four prepared class periods. Open to all classes. This course surveys what is commonly called Early Music, from the earliest known chant to the fully developed Renaissance motet and madrigal. Much of the music from this period was written "for the glory of God." But the secular side of things is considered, too, especially the rise of instrumental music (for harpsichord, recorder, etc.) and the madrigal, with its texts of love, nature, and humor.

23—3 **Baroque Music (1600-1750)**
(6233) Four prepared class periods. Open to all classes. This course surveys music from the first opera to the late works of Bach and Handel. The grand, dramatic styles known as Baroque are seen in its most lavish form, opera, in choral masterpieces such as the *Messiah*, in sacred music such as Bach's organ works, and in instrumental music such as the Brandenburg Concertos. The settings for this music, from the relatively humble churches of Bach's Leipzig to the magnificent Palace of Versailles are considered

24—1 **Classical Music (1750-1820)**
(6241) Four prepared class periods. Open to all classes. In this relatively short period grew and flourished what is considered the Classical style of Western music, and with it came the newly-created symphony. Haydn, Mozart, Beethoven, and others wrote in this new form as well as composing concertos, sonatas, string quartets, and some of the older forms, such as opera and religious music. The historical backdrop to this music — the Enlightenment, the Revolution (American and French), and the Napoleonic Era — are also considered.

(Not offered in 1977-78.)

25—2 **Romantic Music (1820-1900)**
(6252) Four prepared class periods. Open to all classes. The Romantic period is an era of great social, economic, and political change. From the later works of Beethoven through the works of Debussy, we trace the development and change of the "classical" structures. Schubert, Schumann, Mendelssohn, Brahms, Chopin, Liszt, Berlioz, Wagner, Mahler and Strauss are some of the composers that are examined.

(Not offered in 1977-78.)

26—1 **Twentieth Century Music (1900-Present)**
(6261) Four prepared class periods. Open to all classes. The twentieth century is a period of abstraction, and reaction, in art and music. New rhythmic and harmonic languages were developed and used. This course traces the development of the twentieth century style through the works of Debussy, Ravel, Scott Joplin, Stravinsky, Bartok, Ives, Schonberg, Partch, and other major figures in the twentieth century music world.

27—123 **Independent Study in the History and Literature of Music**
(6271) (6272) (6273) Four prepared class periods. Open to Upper Middlers and Seniors. A student who has taken at least one of the other courses in this sequence may, with the permission of the instructor, pursue an independent course of study in either a particular type of music or a particular period of music. This should be related to the period or periods covered in the student's previous course work in this sequence.

28—123 **Jazz**
(6281) (6282) (6283) Four prepared class periods. Open to Upper Middlers and Seniors. A study of the history of classic jazz, dating back to its roots in Africa, its development in New Orleans, it's spreading to New York and Chicago, and its influence on music today. A survey of ragtime, blues, Dixieland, fox-trot, on through the big band era of the thirties, concluding with the jazz rock of today. A study of the influence and contributions of the major personalities such as W. C. Handy, Jelly Roll Morton, Louis Armstrong, Basie, Whiteman, Gershwin and the rest of the greats.

Theory

32—123 **Orchestration and Conducting**
(6321) (6322) (6323) Hours to be arranged. Open to Upper Middlers and Seniors. A comprehensive study of orchestral instruments and their use in this organization. This course is designed to teach arranging for each instrument. Also, basic conducting skills are covered

33—1 **Theory of Music I**
(6331) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. This course offers an introduction to harmonic progression, triads, modes, rhythmic coordination with dictation. Some original work is also expected.

34—2 **Theory of Music II**
(6342) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music I* or permission of the instructor. This course deals with harmonic progressions, modulations, figure bass, and an introduction to counterpoint and harmonic analysis.

35—3 **Theory of Music III**
(6353) Four prepared class periods. Open to Lower Middlers, Upper Middlers, and Seniors. Prerequisite: *Theory of Music II* or permission of the instructor. This course includes advanced figure bass, more complex chords, and a brief introduction to nineteenth and twentieth century techniques.

36—123 **Electronic Music**
(6361) (6362) (6363) Four prepared class periods. Prerequisite: *The Nature of Music (Music 20)* or permission of the Department Chairman. A course for the benefit of those who seek to expand their domains of creativity by understanding and utilizing the conceptual approaches inherent in electronic music synthesizers and related equipment. Using a practical approach, the course begins with the care and feeding of the tape recorder and proceeds to the functioning and operation of electronic music modules. A lab fee of $15.00 is charged for the use of the synthesizer.

40—123 **Advanced Techniques in Electronic Music**
(6401) (6402) (6403) Four prepared class periods. Prerequisite: *Electronic Music (Music 36).* A course designed for the continuation of the skills and techniques developed in *Music 36.* A lab fee of $15.00 is charged for the use of the synthesizer

Performing Arts

All courses are electives, open to Seniors, Uppers, and Lowers, but to Juniors only with permission of the instructor, unless otherwise noted. Courses in theatre are designed for students who wish formal exploration of the elements of stage work and a supplement to (or substitute for) extracurricular work on plays. A variety of experiences is available: some courses are performance-oriented; some are theory-oriented; some are both. Theatre students are encouraged—but not required—to supplement their classwork by participating in any of the numerous productions mounted each year, or they might be invited to join the Andover Touring Company, which for four years has become part of an exchange program with schools in England, touring with *Our Town, Harvey, The Fantasticks,* and *Scenes from American Life* during spring vacation.

Theatre Courses

20—1 **Introduction to Theatre**
(6501) Four class periods. Open to all classes. Using both classical and modern scripts to provide a range of dramatic experiences, the class studies plays in depth and detail to see how

they might be acted, directed, and staged, beginning with script analysis and ending with the staging of scenes and the design and construction of sets and props. Playwrights who might be studied are Miller, Wilder, Shakespeare, Guare, and Brecht, but the choice of plays depends largely upon the interests of the students. The course is intended for students with limited experience in high school theatre and serves as an overview of the major areas of theatre: acting, directing, design, and lighting, each of which might be studied in depth in subsequent courses.

21—1 **Introduction to Acting**
(6511) Four class periods. Open to all classes. This course is designed for students with little or
21—2 no acting experience. By doing exercises, reading, improvisations, and scenes from a wide
(6512) variety of sources (including perhaps Shakespeare, musical comedy, modern plays, and short stories), a student who is curious about the theatre may determine whether he or she has ability or interest in acting. The emphasis is on the variety of acting experiences rather than on a polished final product. Videotape and tape recorders are available for use as study tools.

22—2 **Public Speaking**
(6522) Four class periods. Open to all classes. The course has a dual objective: to learn how to
22—3 speak easily in front of others, and to learn how to speak English well. Students give pre-
(6523) pared and extemporaneous speeches on a variety of topics while studying diction, pronunciation, projection, and other techniques of public speaking.

23—2 **Acting Workshop**
(6532) Four class periods. A theoretical and practical consideration of various acting styles, both
23—3 classical and contemporary. For students with some acting experience, this course em-
(6533) ploys acting exercises, theatre games, improvisation, and scenes from plays to guide the actor toward a greater understanding of his responsibility on stage: to see to what degree he may remove himself from himself.

24—3 **Scene Study**
(6543) Four class periods. Prerequisite: *Theatre 20* or *21*, or significant production experience. For serious, self-motivated students of acting who wish to study one play and one character in depth, this course might be taken in conjunction with the playing of a role in a musical or dramatic production.

25—1 **Directing Workshop**
(6551) Four class periods. Dedicated to the idea that the director's job is the most complex in theatre, the course is designed for students who have had some acting experience and who now wish to study the art of directing. Class members experiment with manageable scenes and short plays which they direct; they examine books on the subject (such as Peter Brook's *The Empty Space* and Cole and Chinoy's *Directors on Directing*) and play scripts, and various styles of direction, interpretations of scenes, and types of drama from classical and contemporary periods. Emphasis is placed on the responsibilities of the director: to his actors, his audience, and his playwright.

26—1 **Stagecraft**
(6561) Four class periods. Open to all classes. Through practical experience in designing, build-
26—3 ing, and lighting, for plays currently being produced, students learn the elements of stage-
(6563) craft, including set construction, stage rigging, and the use of lighting instruments and gels. Text: Parker and Smith, *Scene Design and Stage Lighting*.

27—23 **Play Production**
(6572) Four class periods. Open to all classes. Prerequisite: any other Theatre course or significant
(6573) production experience. This course is oriented toward a performance at the end of the term of a group acting, directing, and design project. The specific text depends somewhat upon the ability of the group, but recent choices have favored the production of dramatic works such as *The Crucible* and *The Skin of Our Teeth*.

28—1 (6581) **28—2** (6582) **28—3** (6583) **Shakespearean Workshop**
Four class periods. Open to all classes. An intensive study of several plays by Shakespeare, with the major emphasis on the spoken word. Close attention is given to pronunciation, diction, rhythm, dynamics, and interpretation. Students read aloud, act out, memorize, present, and record scenes and soliloquies.
See English 508 for a course in Modern Playwrights.

29—2 (6592) **Playwriting**
Four class periods. Each student is expected to write at least one one-act play in addition to certain exercises in monologue, dialogue, and scene setting. The class reads aloud from students' work-in-progress while studying the formal elements in plays by Sophocles, Shakespeare, Goldsmith, Ibsen, Williams, Miller, Becket, and Ionesco, and selected literary criticism focused on drama.

Dance

30—123 (6601) (6602) (6603) **Introduction to Dance**
Four prepared class periods. A formal course in movement and composition which introduces the serious student to the vocabulary and other elements of dance through active participation. The emphasis is not ultimately on public performance, but on the process and the discipline of modern dance.

Physical Education

All new Juniors and new Lowers are required to elect one trimester of *P.E. 10* in addition to their regular athletic commitment.

10—1 (9201) **10—2** (9202) **10—3** (9203) **Physical Education**
Pass/Fail. Limit of fifteen students per section. Four morning class periods per week. The program consists of four phases:
1. Track — a run, jump, throw, self-developing program,
2. Ropes — elementary gymnastics and climbing,
3. Physical Fitness — an introduction to physical conditioning and weight training
4. Drownproofing — a survival-technique swim course.

Two periods per week are spent on Drownproofing and two on the other three phases.

Psychology

The Psychology Department offers four term-contained courses as electives.

10—1 (7101) **10—2** (7102) **10—3** (7102) **Human Awareness**
Pass/Fail. Two double periods. For Juniors and Lowers. Limit of fifteen students per section. A course in human awareness in which the students explore the relationship of their thoughts and feelings to their behavior with other people. Topics explored cover a wide variety of dilemmas encountered in all group experience including dilemmas of membership, isolation, communication, and leadership. These topics are related directly to the experience of living in a boarding school and to the feelings and frustrations that develop in making the personal choices and setting the personal boundaries that are a part of being an individual in a complex world.
(Not offered in 1977-78.)

30—1 (7111) 30—3 (7113) **Human Relations**

Pass/Fail Two double periods For Uppers and Seniors. Limit of fifteen students per section This is a course in Social Psychology Its topic for study is human behavior in small groups Human beings do most of their living, working, and playing in small groups ranging in formality from family to classroom groups The relationships among the members of these groups develop through similar stages and by common processes which determine to an important extent the effectiveness of the group in achieving its goals These stages and processes are a response to two basic human needs the need for belonging and community, on the one hand, and the need for separateness and individual identity, on the other

The classroom group provides students with a laboratory in which to observe group process Members read articles in the professional literature and write papers on topics that reflect upon their own experience (Mrs Kubler-Merrill and Dr Roehrig)

(Not offered in 1977 78)

31—2 (7122) 31—3 (7123) **Human Sexuality**

Four prepared class periods An interdisciplinary course for Uppers and Seniors designed to help students understand the facts of their own sexuality from the biological, social, and psychological points of view The format of the course is a combination of reading, lecture, discussion, writing and examination In addition to the biological facts, topics to be covered include misconceptions and mythologies of sexual growth and development, important features of masculine and feminine psychology as they relate to sexual behavior, the relationships between attitudes and beliefs, and sexual conduct

32—1 (7131) 32—2 (7132) 32—3 (7133) **Introductory Psychology**

Four prepared class periods For Upper Middlers and Seniors. An introductory survey of the diverse methodologies and philosophies that fall into the broad category of "Psychology" The aim of the course is to introduce the student to the many varieties of Psychological inquiry Some of the areas covered are Conditioning and Learning, Cognitive Development, Animal Behavior, Social Psychology, and Personality Theory The format of the course is a combination of lectures and discussion A basic text, *Psychology Today: An Introduction*, is used, as well as Calvin Hall's *A Primer of Freudian Psychology* and supplementary reprints from research journals

(Not offered in 1977-78)

Religion and Philosophy

The department seeks to initiate students into three distinctive human quests not directly considered elsewhere in the formal curriculum: the search for meaning, the search for justice and the search for the foundations of knowledge. The process of initiation is intended not only to provide an introduction to outstanding literature in the field but also to assist the student in effecting a personal appropriation of the search and in developing the necessary skills for its pursuit. Courses are offered in three clusters corresponding to the three quests and at a variety of levels. In each cluster an introductory course (20's) is supplemented by courses emphasizing specific issues (40's) and by courses emphasizing high level theory (50's). All courses are elective and involve four prepared class periods.

I. The Search for Meaning

20—1 (7201) **20—2** (7202) **20—3** (7203)
The Religions of Man: A Literary Perspective
Open to Juniors and Lower Middlers. This course provides an introduction to four of the world's major religions: Judaism, Christianity, Islam and Buddhism. Literary works by such authors as Potok, Unamuno, Wiesel, Hesse and Lewis will provide focus for discussions of how an individual character, in his particular religious tradition, deals with his search for authenticity. Huston Smith's classic text *The Religions of Man* will be used to provide basic information. (Ms. Nolan)

21—1 (7211) **21—2** (7212)
The Development of Ideas in the Old Testament
Open to Juniors and Lower Middlers. A critical analysis and study of the development of ideas in the Old Testament experience of the Hebrew people, in particular the conception of God, Man, Revelation, Providence, etc. (Mr. Warren)

40—1 (7401) **40—2** (7402)
Jewish Identity and Experience
Open to Upper Middlers and Seniors. Post World War II Jewish authors such as Wiesel, Buber, Singer, Memmi and Koestler will be the focus of this course which will investigate the modern Jewish identity and experience. In order to provide a necessary historical perspective in an investigation and analysis such as this, these more contemporary authors and philosophers will be compared with Jewish writings from antiquity. (Ms. Nolan)

41—1 (7411) **41—2** (7412) **41—3** (7413)
The New Testament
Open to Upper Middlers and Seniors. An introductory course in the New Testament providing an analysis of the *Gospels of Matthew, Mark, Luke,* and *John; The Letters of Paul;* and *The Book of Revelation.* (Mr Warren)

42—1 (7421) **42—3** (7423)
Views of Human Nature
Open to Upper Middlers and Seniors, and to Lower Middlers with permission of Instructor. A critical examination of psychoanalysis, behaviorism, biology, existentialism and transcendentalism in light of the answers they provide to the following questions: Does man have a characteristic nature? What are his basic needs, rights, obligations and values? Is man free? Is man responsible for his actions? Given an understanding of man, how should we structure society to satisfy his needs and take advantage of his potentials? Readings: Jean-Paul Sartre, *Existentialism is a Humanism;* Sigmund Freud, *Civilization and its Discontents;* Konrad Lorenz, *On Aggression;* B. F. Skinner, *Walden Two* and *Beyond Freedom and Dignity;* Sam Keen, *An Apology for Wonder.* (Mr. Hodgson)

45—2 (7452) **45—3** (7453)
From Antiquity to Modernity: The Evolution of Christian Thought
Open to Upper Middlers and Seniors. How do disciples cope with the message once the messenger is no longer in their midst? This question provides the foundation for this course which is organized and approached historically in an investigation, analysis and evaluation of the evolution of Christian thought. The materials used will be primary sources focused on major movements and figures in the 2,000 years of Christianity. (Ms. Nolan)

50—1 (7501) **50—3** (7503)
Reason, Faith and Transcendence
Open to Upper Middlers and Seniors. A critical examination of the relationship between reason and a belief in the existence of a reality that transcends ordinary human experience. Some of the questions to be asked are: What are the sources of humanexperience? What is the relationship between the rational and the real? What is the nature of religious belief? What is the basis of the traditional antagonism between science and religion? Readings from Plato, Augustine, Hume, Kant, Freud, Bertrand Russell, William James, Paul Tillich, Eugene Herrigel, Carlos Casteneda and Joseph Pearce. (Mr Hodgson)

53—2 (7532)
Existentialism
Open to Upper Middlers and Seniors. The term "existentialism" covers a broad range of attitudes and values which are joined together by an emphasis on human existence. The

authors brought together in its name share a characteristic concern for the problems of meaning, identity and choice that confront men and women in everyday life. The lectures, discussions and readings are designed to help us locate and express these problems as they confront each of us in our own lives and to assist in understanding and resolving them by drawing on the experiences and insights of the major existentialist thinkers. Readings: Nikos Kazantzakis, *Zorba the Greek*; Friedrich Nietzsche, *The Genealogy of Morals*, Jean-Paul Sartre, *No Exit* and *Being and Nothingness*, Martin Heidegger, *What is Philosophy*; Soren Kierkegaard, *The Sickness unto Death*; Martin Buber, *I and Thou* (Mr. Hodgson)

II. The Search for Justice

22—1 (7221) **22—3** (7223) **Values Clarification: Situations, Discernment and Decisions**
Open to Juniors and Lower Middlers. Rooted in concrete issues and experiences of everyday living this course will provide an introduction to the skill of discernment. Drawing case studies from topical political, legal and medical issues as well as from the boarding school experience, the class will critically investigate the often unspoken presuppositions which give rise to moral decisions. (Dr. Avery and Ms. Nolan)

43—1 (7431) **Ethical Issues in the Sciences**
Open to Upper Middlers and Seniors. The number of scientifically related ethical issues has increased significantly in recent years with the growth of the human sciences and their corresponding technologies. Biological research has spawned the technologies of population control, life prolongation and genetic engineering. Psychological and neurophysiological research has given birth to the technologies of psychotherapy, behavior modification and psychosurgery. The course consists of a critical examination of the morality of implementing these and related technologies. Readings include texts and articles on population control, behavior modification, genetic engineering and psychosurgery. (Dr. Avery)

44—1 (7441) **44—2** (7442) **44—3** (7443) **Contemporary Ethics**
Open to Upper Middlers and Seniors. The course focuses on man's contemporary ethical-moral dilemmas, with attention to his ability to form deep personal relationships, to relate to his technosocial environment and himself. Readings include *Art of Loving*, Fromm; *The End of the Road*, Barth; *A Clockwork Orange*, Burgess; *Future Shock*, Tofler, etc. (Mr. Warren)

46—2 (7462) **Law and Morality**
Open to Upper Middlers and Seniors, and to Lower Middlers with permission of Instructor. A critical examination of an intricate web of problems which arise out of the relationship between law and morality. Among the questions to be asked are: Does society ever have the right to restrict an individual's private behavior? On what, if any, grounds are such restrictions justifiable? To what degree should a society incorporate "popular" morality into law? Is an individual ever morally justified in breaking a law? If so, under what circumstances? Readings from Plato, Hobbes, J. S. Mill, Lord Patrick Devlin, Abe Fortas, O. W. Holmes and Martin Luther King, Jr. (Mr. Hodgson)

47—3 (7473) **Ethics and Education**
Open to Upper Middlers and Seniors. Education necessarily involves judgements of value and as a topic continues to arouse much moral fervour. Examining the ethical presuppositions of a variety of educational systems and considering some more specific issues (Should education be compulsory? Can you educate someone in morality? What is indoctrination? What, if any, is the role of authority and discipline in education?), the course attempts to provide an opportunity for the student to grow in awareness of and become more actively involved in the value judgements that form his own educational experience. (Dr. Avery)

51—1 (7511) 51—3 (7513) **In Search of Justice: from Socrates to Marx**
Open to Upper Middlers and Seniors. God, emotion, logic, social necessity and economic laws have all been invoked as the final arbiter of justice. The class will examine the major answers to the problem developed by Plato, Aristotle, Kant, Mill, Marx and others The course aims to assist critical awareness of the ultimate criteria of one's own evaluations and those of others so that he be better equipped to make his own contribution to the never-ending search for justice. (Dr. Avery)

III. The Search for the Foundations of Knowledge

48—3 (7483) **Proof and Persuasion**
Open to Upper Middlers and Seniors, and to Lower Middlers with permission of Instructor. An introduction to the patterns of right and wrong thinking. Some of the questions to be discussed are: What is the difference between a good argument and a bad one? What are the correct logical relationships between various types of sentences? What are the common fallacies of thought? What are the limitations of logic? In addition to a presentation of the basic principles of logic, the course will include a critical examination of the patterns of thought one encounters every day in magazines, newspapers, scientific journals and television commercials. (Mr. Hodgson)

52—1 (7521) 52—2 (7522) **Discovery, Understanding and Creativity**
Open to Upper Middlers and Seniors. An inquiry into the foundations of human knowledge which seeks to identify and assess plausible answers to the following questions: What is the nature of knowledge? How is knowledge acquired? How does it advance? What are the ingredients of scientific genius and artistic creativity? Readings from Plato, Aristotle, Descartes, Hume, Kant, Hanson, Polanyi, Watson, Kuhn, Nietzsche and Merleau-Ponty. (Mr. Hodgson)

Science

The diploma requirement in Science is one year-long course in a laboratory science at the *20*-level or higher.

Juniors and Lower Middlers may pursue a three- or four-year sequence of science courses designed to provide an understanding of science and of scientific methods and thinking as part of a general education. The sequence also provides a sound foundation for later work in college; courses designated by the number *40* are more difficult than the regular ones, and admission is granted only to selected students. Some prepare for the Advanced Placement Examinations and consequently for advanced standing in college. Able students who have taken a regular course before their Senior year may prepare for the Advanced Placement Examinations by taking the *52* course for that subject. In addition, the *40* and *50* courses provide an opportunity for work to the student who plans further study in a particular field

In general, students are encouraged to take a variety of courses and to acquire a broad background of knowledge in the different sciences rather than to specialize. For the student with special interests, individual projects are encour-

aged to the extent that they are consistent with safety, the equipment available, and the capacity of the student.

The *Science Courses 10-19* are open to Juniors and Lower Middlers. Able Juniors may elect courses at the *20*-level with permission of the Department Chairman.

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Science 10—0 (8000) **Science**
Five periods, three prepared. A laboratory course in beginning physical science using an expanded version of a syllabus called "Introductory Physical Science". Students explore the nature of matter in its solid, liquid, and gaseous forms. Analyses of mixtures and compounds, and a study of radioactivity lead to an atomic concept of matter. Many experiments are quantitative and require careful recording of data, drawing of graphs, and calculations of results. (Mrs. Whyte)

Science 11—3 (8013) **Preparation for the Physical Science**
Pass/Fail. Four unprepared periods or two prepared periods per week. A course for Juniors or Lowers who are planning to take Chemistry or Physics the following year. Topics covered include the use of the slide rule, logarithms, exponential notation, significant figures, the metric system and dimensional analysis. There is laboratory work. (Dr. Minné)

Science 12—2 (8022) **Earth Science**
Four prepared class periods. This course teaches some of the methods of inquiry in earth science. Through color slides, topographic maps, geological maps and aerial photographs, the student learns some of the elementary aspects of the earth's structure, stratigraphy, weathering, erosion, volcanism, and mineralogy. Some lab work is involved, emphasizing simple measurements and careful observations. (Dr. Wilson)

Science 13—3 (8033) **Astronomy — The Solar System**
Four prepared class periods. The 1970's will certainly be called the era of planetary exploration. Even now, as our spacecraft search for life on Mars and send back pictures of Jupiter, other more ambitious missions are planned which will probe the mysteries of Saturn, Titan, Uranus and perhaps a comet. This course will study each planet in detail and then evaluate the theories for the formation of our solar system. Other topics for discussion will include the chemical evolution of life on earth, the future of the space program, and the observation of the night sky. Special sessions will be scheduled in the Phillips Academy observatory and a trip will be made to the planetarium at the Boston Museum of Science. This course is particularly recommended for those students who might be interested in taking *Astronomy 30* or *35* later. (Not open to students in *Physics 30*.)(Mr. Sarton)

Science 15—1 (8051) **Oceanography**
Four prepared class periods. This course consists of elementary physical oceanography and marine biology. There are two field trips, one to Gloucester to observe tidal zones and beach profiles and to collect specimens, the other to the New England Aquarium (Dr. Wilson and a member of the Biology Department)

Science 16—23 (8065) **Ecology (T2)** (a two-term commitment)
Four prepared class periods. Open to Juniors and Lower Middlers. The course is designed to introduce students to the basic concepts of ecology. The material offered explores the meaning of interdependence and inter-relationships within environment, population dynamics; trophic levels and energy; adaptation; succession, and the impact of man upon his environment and some of the problems caused by his use and abuse of basic resources. Class material is coordinated with and reinforced by laboratory studies of population growth, computer programs to study environmental problems and pertinent field trips. One of the major objectives of the course is to develop within the student an understanding of and sensitivity to the balance and beauty of nature. (Mrs. Hawkes)

Science 19—0 (8070) **Introduction to Physics**
Four prepared class periods. This is an honors course for talented Juniors with a strong interest and background in science and mathematics. Students entering this course should have *mastered* a year of algebra as it is used profusely in solving word problems. There is regular laboratory work. Successful completion of *Science 19* prepares students for *Physics 30*. The text is *Physics* from the Physical Science Study Committee.

Science 30—2 (8082) **Energy and the Future**
Four prepared class periods. Open to Uppers and Seniors who have either completed or are completing the science requirement. This course is taught by faculty in the Science Division. Its purpose is to study energy in a modern biological, geological, physical-chemical, and social context.While several fundamental aspects of science and energy are inspected, a significant amount of time is devoted to issues that transcend *mere* technology. The course of study considers fossil fuels, nuclear energy, solar, geothermal, wind, tidal, and other sources of energy, biological and ecological aspects of energy, public health, risks, costs, governmental policies and programs, demographic and moral considerations. The intent is that through the unifying theme of Energy, students can grasp a broader understanding of their world, as well as perhaps a further glimpse into the present and future of man. (Mr. Cone, Mr Sarton, and Dr. Wilson)

Biology

30—0 (8100) **Biology**
Three prepared periods and one double, unprepared laboratory period. The course stresses the unity of life, rather than the diversity, by emphasizing the function common to all living things. It covers, in plants, animals, and microorganisms the fundamental principles of metabolism, including nutrition, gas exchange, transport, excretion, and homeostasis; responsiveness and coordination; reproduction, genetics, and development, the principles and history of evolution; and the principles of ecology.

The laboratory work includes training in the use of the compound and stereoscopic microscopes and other laboratory equipment. It requires careful observation, mastery of techniques, and accurate recording of results. Several laboratory periods are set aside for field trips featuring ecology and conservation. There is opportunity for work on individual laboratory projects.

44—1 (8121) **Biology**
Prerequisite: *Biology 30* or its equivalent. Three prepared periods and one double, unprepared laboratory period. A concentrated, in-depth consideration of four systems of the human body: nervous, reproductive, endocrine, and circulatory. Laboratory work will consist of a detailed anatomical study of a representative mammal (cat or fetal pig) and a histological study of the major organs of the body.
44—2 (8122)
44—3 (8123)

52—23 (8195) **Biology (T2)** (a two-term commitment)
(Formerly *Biology 45-23.*) Prerequisite: one year of Biology. Preference given to Seniors. Four prepared class periods and one double, unprepared laboratory period. In addition to a review of basic biology, new material is presented as the course progresses. The combination of review and new work prepares students for the Advanced Placement Examination of the College Entrance Examination Board. Admission to course by permission of Department Chairman only.

Chemistry

25—0 (8210) **Chemistry**
(Formerly *Chemistry 20-0.*) Prerequisite: Completion of *Mathematics 10* or the equivalent. For Lower Middlers and Upper Middlers. Three prepared periods and one unprepared, double laboratory period. The course includes a systematic study of matter and the changes it undergoes. Emphasis is placed on the reasoning involved in the development of modern theory and general concepts rather than memorization of descriptive chemistry. Laboratory work is closely related to topics covered in recitation.

30—0 **Chemistry**
(8220) Prerequisite: Completion of *Mathematics 26* or the equivalent Three prepared periods and one unprepared, double laboratory period. The course is designed for students with more maturity and mathematical background than those taking *Chemistry 25*. As in that course, the modern theoretical framework of chemistry is emphasized, and the laboratory work is closely related to topics covered in recitation These topics are treated in greater depth and with more emphasis on quantitative rather than qualitative answers.

42—2 **Research in Chemistry**
(8232) Prerequisite: *Chemistry 25* or *Chemistry 30* completed with distinction, and permission of the instructor One prepared period and three unprepared, double laboratory periods, or the equivalent. Each student selects a research project in consultation with the instructor and then carries out the necessary work. (Dr Minné)

44—1 **Chemistry**
(8241) Prerequisite: Completion of *Chemistry 25* or the equivalent. Three prepared periods and two unprepared, double laboratory periods For students who wish to study chemistry further without trying to achieve advanced placement. This course is an introduction to stereochemistry, the study of the symmetry and shapes of organic and inorganic molecules (Dr. Rees)

52—23 **Chemistry (T2)** (a two-term commitment)
(8275) (Formerly *Chemistry 45-23*.) Prerequisites: *Chemistry 25* or *Chemistry 30* completed with distinction and a year of physics, which may be taken concurrently Four prepared periods and one unprepared, double laboratory period The course is for students who wish to prepare for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board

55—0 **Chemistry**
(8280) (Formerly *Chemistry 48-0*.) Prerequisite One year of physics Three prepared periods for recitation and two unprepared, double laboratory periods This course is open to a limited number of able students, by invitation, who have strong scholastic records in mathematics and physics. No prior course in chemistry is expected. It is essentially the equivalent of a first-year college course, and prepares students for the Advanced Placement Examination in Chemistry of the College Entrance Examination Board

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20—0 **Physics**
(8310) (Formerly *Physics 25-0*.) Five class periods, one unprepared Open primarily to Lower Middlers. An introductory course in the basic concepts of physics. A less rigorous course than *Physics 30*, it is designed for students with latent mathematical maturity Students should have completed one year of algebra and one year of geometry before enrolling Successful completion of the course prepares the student for the College Board Achievement Test in Physics. Text *Concepts of Physics* by Miller, Dillon, and Smith.

30—1 **College Physics**
(8321) Five class periods, one unprepared Co-requisite: Registration in at least *Mathematics 30* or its equivalent. A non-calculus, B-level Advanced Placement physics course for students with ability in mathematics and science, this first term is a study of classical mechanics (including rotational dynamics and physical pendula), with extensive laboratory work an integral part of the course. *Physics 30-1* (or equivalent) is a prerequisite for *Physics 30-23 (T2)*. Text: *College Physics*, by Franklin Miller

30—23 **College Physics (T2)** (a two-term commitment)
(8325) Prerequisite: *Physics 30-1*. Five class periods, one unprepared. Wave motion, heat, kinetic molecular theory, thermodynamics and electrostatics in Winter Term. Electrodynamics (including magnetism), geometrical and physical optics, early atomic and nuclear theory in the Spring Term.

52—12 **Advanced Physics (T2)** (a two-term commitment)
(8374) (Formerly *Physics 45-12*.) Prerequisite: Honor grade in *Physics 30* (or equivalent) and pre-

vious completion of or concurrent registration in a calculus course. This is a rigorous course in mechanics (Fall Term) and electro-statics and dynamics (Winter Term) using both scalar and vector calculus extensively. This course generally prepares candidates successfully for the C-level Advanced Placement Examination in Physics and entrance to *honor level* programs in physics at the best colleges in the world. Text: *Physics* by Resnick and Halliday.

55—0 (8380) **Physics Honors**
(Formerly *Physics 40.*) Four prepared class periods and one unprepared double laboratory period. An advanced course using considerable scalar and vector calculus. Open only by permission of the Department Chairman to a small group of very talented students who are concurrently taking at least a first year calculus course. The course is designed for students who have not previously taken a course in physics, may have taken a chemistry course, and generally plan to take the C-level Advanced Placement Examination in Physics. This is a very rigorous course and only those who demonstrate great talent and interest should attempt it. In the last few years it has tended to be more theoretically oriented than other departmental offerings. Text: *Physics* by Resnick and Halliday.

60—3 (8393) **Relativity and Quantum Mechanics**
(Formerly *Physics 50.*) Prerequisities: *Physics 30* and *Math 52*. Four prepared class periods. Relativity and Quantum Mechanics are two theories that completely revolutionized man's thinking about the universe. The course is a survey of the basic ideas underlying these theories. Special mathematical techniques needed for a better understanding of the material are developed in the course. (Dr. Perrin)

Special Science Courses

Animal Behavior 30—1 (8411) 30—3 (8413) **Animal Behavior**
Prerequisite: one year of Biology. Limit of sixteen students. Preference given to Seniors. Three prepared class periods and one unprepared double laboratory period. The course is designed to familiarize the student with the basic principles of animal behavior. The topics which receive the greatest emphasis are: territoriality, courtship, parental behavior, migration, dominance, and the evolution of behavior patterns. Readings from *On Aggression, The Territorial Imperative*, and "Scientific American" reprints are included.

Astronomy 30—1 (8421) **Observational Astronomy**
Four prepared class periods. Astronomy is one of the few sciences left that the amateur can enjoy while still making meaningful contributions to the field. This course exposes students to observing the heavens with the unaided eye, binoculars, and telescopes. Classes are scheduled in the Observatory three nights each week. Students identify constellations, track asteroids and planets, and learn how to observe using a telescope. Limit of 10 students. (Mr. Sarton)

Astronomy 35—2 (8432) **Astronomy — The Universe Beyond the Solar System**
Four prepared class periods. This course is designed for Uppers and Seniors who are interested in a college level course in modern astronomy. We shall consider some of the most fantastic objects in the known universe, such as quasars, pulsars, and black holes. In addition we shall discuss the theories which describe these objects: theories that analyze the evolution of stars, the formation of the universe, the implications of relativity for space travel, and the search for extraterrestrial intelligence (ETI). The course will be made up of slide presentations, films, discussions and sessions in the Phillips Academy observatory. (Recommended for students who have had *Science 13.*)

Geology 34—3 (8453) **Geology**
Three prepared class periods and one double, unprepared laboratory period. This is the equivalent of a one semester college course in physical geology. The laboratory work deals with rocks and minerals from the Academy's collection of several hundred specimens, geologic maps, topographic maps and aerial photographs. Enrollment is limited to a dozen students (first preference to Seniors) in order to accommodate transportation on field trips. Prerequisite: prior fulfillment of the science requirement. (Dr. Wilson)

Phillips Academy
COURSE OF STUDY 1977-78
ADDENDUM

[STORY AND THE SOCIAL SCIENCES (pp. 25-33)

[story 41-123 (Not offered in 1977-78)

[story 42-123 (Not offered in 1977-78)

[story 64-1 MODERN CHINA
(2641) Four prepared class periods. For Upper Middlers and Seniors.
64-3 After an introduction of traditional Chinese thought and
(2643) institutions, the course will concentrate on events since 1800 in China. There will be much emphasis on China's response to the West, on economic, intellectual and political developments during the nineteenth and twentieth centuries, and on the distinctive form communism has adopted in China. There will be readings in history and literature, lectures, written exercises, and much of the course will be devoted to discussion. (Mrs. Sizer)

[story 65-2 MODERN JAPAN
(2652) Four prepared class periods. For Upper Middlers and Seniors. After an introduction of traditional thought and feudal social structure in Japan, the course will move on to a closer look at ideas, events and developments since 1800. An attempt will be made to understand the unique way in which Japan responded to the challenge of the west. Readings will be in historical texts, visitors' impressions, sociological descriptions and leterature, with an effort at understanding the outstanding features of Japanese culture, politics and economics through analysis and discussion. (Mrs. Sizer)

ELIGION AND PHILOSOPHY (pp. 53-56)

elPhil 23-1 BIBLICAL NARRATIVE: THE PERSONAL DIMENSION
(7231) Four prepared class periods. Open to Juniors, Lower and
23-2 Upper Middlers, and Seniors. Adam and Eve, Cain and Abel,
(7232) Abraham and Isaac, Jacob and Esau, Rachel and Leah, Joseph and his brothers, David, Solomon, Elijah, Esther -- these and numerous other Biblical names are closely associated with our Western religious traditions.

Many of these are prototypical religious figures, with a sense of the Divine as well as of personal mission. A few are rather the reverse, oblivious to the Divine dimension and opposers of the heroes and heroines.

Yet all of them are distinct human personalities, engaged in adventures and struggles, loves and rivalries, feelings of joy and of deep sorrow. It is this human dimension which will be the focus in this course.

(Over)

RelPhil 23-1 and 23-2 (continued):

By reading a selection of Biblical narratives ranging from Genesis through the Prophets, we shall hopefully become better acquainted with some of these personalities, comprehe their mythic significance for later generations, and explore their personal and religious meanings for ourselves today. (Rabbi Gendler)

RelPhil 24-1 (7241) POST-BIBLICAL JEWISH THOUGHT

Curious, isn't it? The Jewish people, whose Scriptures firs speak of the promise of a Messiah, rejected and continues to reject the Messianic claims of the world's most widely accepted Messianic figure, Jesus of Nazareth. Why?

Yet further, the Jewish people continues to exist, and seems to provide spiritual sustenance and personal inspiration for its members. How? From what sources and teachings?

By reading and discussing a variety of selections, beginning with the classical Rabbinic age (contemporary with Jesus) an continuing through medieval philosophers and commentators, poets and mystics, Hasidic story tellers and modern thinkers as well as the contemporary Jewish "counter-culture," we'll try to gain some sense of the sweep of this tradition, its vision of the world, and what it has to say about some of th basic questions of human life. Open to Lower Middlers, Uppe Middlers, and Seniors. (Rabbi Gendler)

RelPhil 49-2 (7492) NONVIOLENCE IN THEORY AND PRACTICE

Four prepared class periods. Open to Upper Middlers and Seniors. The militarily most destructive century in human history, our twentieth century, has also been one which has seen significant mass applications of nonviolence in conflic situations. Names which come immediately to mind are Gandhi and Martin Luther King, Jr. What is the theory of this approach to human conflict? What are some of its psychologi assumptions? Are they valid? What is its religious and hum significance? Has nonviolence been tried at earlier periods of human history? When? With what results? By what means does it operate? What are its prospects for the age ahead? We shall use case histories, the testimonies of those direct involved in such struggles, some simulated situations in cla as well as critical and theoretical studies in trying to clarify and comprehend some of these elements of nonviolence Readings may include selections from Mulford Sibley's The Quiet Battle, Richard Gregg's The Power of Nonviolence, Joan Bondurant's The Conquest of Violence, writings of and about Gandhi and King, as well as some new experimental curriculum material. (Rabbi Gendler)

SPANISH (pp. 45-47) WINTER TERM IN MEXICO

Students enrolled in a Spanish course (22 or higher) may ele to spend the Winter Term in Mexico, receiving one Trimester credit in Spanish. As is the case with all off-campus projects, approval for participation in the Winter Term in Mexico program is dependent on the student's not being enro in any year-long courses (except in Spanish) and on the student's not needing to take on-campus courses in order to meet diploma requirements. Final approval for participatio in this program will be made by the Dean of the Academy.

Phillips Academy, Andover, Massachusetts 01810

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